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Socio-technical systems/quality of working life (STS/QWL) alternative paradigm : an urban secondary school experience (1982-1983).

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SOCIO-TECHNICAL SYSTEMS/QUALITY OF WORKING LIFE (STS/QWL) ALTERNATIVE PARADIGM: AN URBAN SECONDARY SCHOOL EXPERIENCE (1982-1983)

A Dissertation Presented

by

ANTONIO GIZZI

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To

My Loving Wife, Millie,
and
My Children, Domenic, Maria, Anthony, Marc, and Christopher,
for their love, respect, patience, understanding, and support

*

My Parents, Domenico and Maria,
for their love, values, and guidance

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and Danny and Marcus

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and Linda (soon-to-be)

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My In-Laws, Ralph and Ernestina Grande

and

The battered victims of the bureaucracy and the political
agendas at Central High School and schools everywhere,
the students and the faculties, who must survive
ultimately in spite of the obstacles

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ABSTRACT

SOCIO-TECHNICAL SYSTEMS/QUALITY OF WORKING LIFE (STS/QWL)
ALTERNATIVE PARADIGM: AN URBAN SECONDARY SCHOOL
EXPERIENCE (1982-1983)

SEPTEMBER, 1988

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The primary purpose of this study was to (1) identify, (2) evaluate, and (3) refine and define, by reflection on the literature, the Socio-Technical Systems/Quality of Working Life (STS/QWL) characteristic elements used in a change strategy in a Boston urban secondary school during the 1982-1983 school year that offered to improve the quality of working life for the staff in that environment.

A taped interview procedure was used to administer a ten- and six-question optional interview schedule developed from the informal interviews during 1982-1983, which included study-elected questions. The principal question focus addressed (1) the identification of the STS/QWL characteristic elements that suggested an improvement in the study environment; (2) acknowledgment of obstacles and contaminants; and (3) recognition of the positive or negative efficacy dimensions of the STS/QWL paradigm used as the change strategy.

Independent analyses of the ten-question interview responses were applied to the ten common STS/QWL constructs or descriptions, as well as an optional series of descriptions specific to each question. The thirty-six stakeholder sample, arranged into three categories to ensure confidentiality, included four responses used in the development of a final set of questions and were not included in the data analysis.

The results suggested the following: The refinement process defined the ten STS/QWL characteristic elements, reflected in the literature, indicative of an improvement in the quality of working life of all but three stakeholders, consequently validating the study year observations. Obstacles and contaminants were acknowledged and labeled as controllable and uncontrollable. The positive efficacy dimensions of the STS/QWL paradigm characteristics and elements were affirmed, but were prematurely curtailed by the presence of the contaminants.

This study suggests a base for the institutionalization and diffusion of the STS/QWL paradigm and for further study.

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CHAPTER 1

INTRODUCTION

Statement of the Problem

The turbulence of our rapidly changing times indicates a need to improve the effectiveness and the quality of urban secondary school education (Ferguson, 1980, p. 286; O'Toole, 1975, p. 31). One of the perceived solutions offered is the improvement of the quality of working life (QWL) for faculties of urban secondary schools through an alternative paradigm--Socio-Technical Systems/Quality of Working Life [STS/QWL] (Herrick, 1983, p. 7; Wirth, 1983, p. 191).

Rationale for the Study

One reason cited by observers for the failure to attain effective and quality education is the perceived structure of the school as a workplace (Herrick, 1985c, pp. 6-8; Pratzner and Russell, 1984, pp. 2, 33). The significance of the workplace concept is described by Goodlad (1984):

> We must give attention to . . . the workplace. The circumstance of teaching must provide optimum opportunity for teaching and learning to proceed. When inhibited by problems of the workplace that appear to them not to be within their control, it is reasonable to expect frustration and dissatisfaction to set in. Undoubtedly, teacher effectiveness, in turn, is constrained, and the very problems frustrating teachers are exacerbated. Students' perceptions of the quality of education being provided decline. It is reasonable to assume that the actual quality of this education will decline also. (p. 180)

The result is a compelling need among educators to address survival by restructuring the workplace, the school, in order to improve the

effectiveness and the quality of education (Carnegie Forum on Education and the Economy [CFEE], 1986, p. 56; Committee for Economic Development [CED], 1985, p. xiii; National Governors' Association Center for Policy Research and Analysis [NGACPRA], 1986, p. 51).

Interest in the STS/QWL concept and approach is evidenced by the federal government, local school systems, and teachers' unions and associations, private and nonprofit institutions and foundations, and institutions of higher education. Several administrators of urban secondary schools and STS/QWL consultants and theorists have expressed serious interest in this study of an urban secondary school experience as a significant one that should be shared.

Purpose of the Study

The primary purpose of this study was to attempt to determine those elements that offer to characterize or describe an improvement in the QWL for faculties in urban secondary schools. Secondly, the purpose was to evaluate those characteristics identified and used as a change strategy for a particular experience during the school year 1982-1983 at an urban secondary school in Boston, Massachusetts, to be referred to in this study as "Central High School." Thirdly, this study will reflect on the literatures and refine those characteristics defining the QWL for the urban secondary school environment. The literatures on educational history, leadership, participative decision-making, selected educational models, and STS/QWL concepts provide the theoretical framework for the study.

Importance of the Study

Teacher effectiveness and quality education, as measured by Goodlad (1984) and others, have been difficult to achieve within the current models of education. According to critics and implicit in the first wave reform reports, such as "A Nation At Risk" (Gross and Gross, 1985), the current models of education have had limited success as school improvement models (Cuban, 1983; Sizer, 1983). "The history of American education is filled with the litter of burnt-out models which emphasized one extreme at the expense of the other" (Wirth, 1983, p. 252).

The need for a paradigm that addresses the effectiveness and the quality of education in urban secondary schools is critical when one considers that prior failures of other models to achieve the effectiveness and the quality of education have been attributed to the workplace (CFEE, 1986, p. 56; NGACPRA, 1986, p. 51). The literature on STS/QWL specific to urban secondary schools is scarce (Goodlad, 1984, p. 173; Wirth, 1983, p. 173). Four ERIC searches, the latest on February 3, 1987, have corroborated this. Therefore, it has been necessary to review other bodies of literature discussing STS/QWL characteristics.

Theoretical Rationale for the Study

STS/QWL researchers and practitioners urge implementation and subsequent research of the STS/QWL paradigm in urban secondary schools as well as in public schools in general (Herrick, 1983, p. 23; Wirth, 1983, p. 173). The STS/QWL paradigm is a new and, therefore, unstudied phenomenon in public education; therefore, the need exists for qualitative

studies of the paradigm in operation so that the significant experiences and elements characterizing improvements in the quality of working life can be understood and diffused (Pratzner and Russell, 1984, p. 43). The message of the second wave reports (CFEE, 1986; NGACPRA, 1986), the implicit failure of existing education models, the support of STS/QWL practitioners, and the several interested audiences make it important to share the observations of the experiences resulting from the implementation of STS/QWL characteristics at Central High School.

Delineation of the Study

The QWL movement has been significantly successful in the private sector since the 1973 landmark signing of "the letter of agreement" between the United Auto Workers (UAW) and General Motors (GM) [see Appendix A for the text of the letter of agreement]. However, it has not been significantly evidenced in the public sector. The public school practice of borrowing not the whole but only a portion of the successful models in the private sector generally results in piecemeal applications that are condescending, gratuitous exercises in teacher involvement and have not generated the perceived effectiveness and quality education desired.

The arguments of this study are (1) that the piecemeal approach in urban secondary public school education lacks the capacity to meet the challenge of our changing and turbulent times, and (2) that the STS/QWL paradigm is a system of change that can meet this challenge, with its genuinely high employee involvement, such as in participative leadership,

which requires sharing and delegating power. This position is developed in Chapter 2 of this study and is derived from the literatures of leadership, participative decision-making, selected models, and STS/QWL.

Assumptions

The following assumptions underly this study:

1. A bias in favor of joint optimization of both of the STS/QWL dimensions--social and technical--of the system concept in an open system.

2. A bias in favor of the validity of coequal management-employee "participative leadership."

3. Perceptions of the literatures reviewed with the bias of a commonsense approach to what can work, what shows promise, what does not work, and the reasons for the successes or failures of various methods.

4. A bias as a result of experience as a participant-observer who has had direct participation, taken daily field notes, conducted face-to-face subjective evaluations with numerous stakeholders, corresponded with persons external to the school as a standing system and/or to the school system, and his use of school statistics that formulate a substantial part of the evaluation base in the study.

5. Implicit in the improvement of QWL for faculties is the improvement of the quality of education.

6. Implicit in the STS/QWL paradigm is not only its representation of the confluence of the characterized ideals of the literatures of leadership, participation, effective schools, and others, but also its added dimension of joint optimization. In addition, "the ideal is

pentecostal--all parties speak with tongues" (Trist, 1981, p. 49). This ideal strives to eliminate the master-servant relationship that dates back to the days of the Egyptians and the Mesopotamians. It is further implicit that the STS/QWL paradigm makes it possible for all individuals who want to lead and to learn and work to their limits can do so.

Limitations

This research effort has the following limitations:

1. The specific focus of the research is limited to urban secondary schools.

2. The research literature is intended to relate to a particular participative management change effort (STS/QWL) attempted during a specific period: September, 1982, to June, 1983.

3. The paucity of literature on STS/QWL specific to urban secondary schools required examination of other bodies of knowledge.

4. The qualitative case study relied on the researcher's role as participant-observer. (This role as a component of his quadrangular role is described in Chapter 3.)

5. This study focuses neither on curriculum nor instruction, but on improving QWL through a change of the whole system of interdependencies.

6. The STS/QWL change effort was not endorsed by the central or district-level administration, nor was it a part of a total school system change; it was a school-based initiative at a single school which was considered a standing system.

7. The STS/QWL change effort was contaminated by a counter-change

effort sponsored by the central office soon after it was operationalized.

Considering the limitations, the researcher concludes that the literature evidence is sufficient and that the problem is important and researchable in relation to the bodies of knowledge examined. However, evidence that the change effort produced certain results will be subjective, as suggested by the STS/QWL evaluation literature reviewed. Every attempt will be made to construct objective criteria for validity.

Delimitations

This study will review studies and perceptions of others, some of which are related to quantitative data and psychological inferences regarding leadership and participation in public schools and in business and industry. The delimitations of this study are as follows:

1. This study addresses the findings of these theories from the perspective of the researcher as a consumer and a practitioner in search of evidence to support a particular change effort.

2. This study is not intended as an argument about the validity of certain psychological hypotheses underlying particular theories nor the researchers from whom they emanate. It is intended, rather, to speak to the researcher's perception of the usefulness and validity of these theories and concepts.

Definitions and Labels

Socio-Technical Systems/Quality of Working Life (STS/QWL). Although they vary, basic to all STS/QWL definitions is the principle of the joint optimization of both STS/QWL dimensions: social and technical. The

social dimension refers to the human side of the workplace; the technical, to the productive, or performance, side. Neither is operational as a single dimension; they work together, each as a coproducer of the other. Pratzner and Russell (1984) offer the following definition of STS/QWL:

> Quality of work life activities are ways of structuring jobs and organizing work that typically have a dual focus of (1) improving the economic viability of an organization, and (2) making work a more satisfying and rewarding experience for workers and managers. (p. 3)

Joint Optimization. In this study, joint optimization refers to what the sociotechnical designers argue: When the social scientists and the engineers consider only how their own system can be optimized in the workplace, they both fail to recognize the interdependence of each system. Only when both systems--the social and technical--are jointly optimized and when an attempt is made to find the best complementary fit between them can the outcome of the work be maximized.

Participative Decision-Making (PDM). In the use of the term participative decision-making (PDM) in this study, the perspectives of the literatures reviewed are recognized. However, regarding PDM in the public and private sectors, the researcher assumes a mental reservation based on his years of experience in both sectors of observing and, more significantly, of listening to owners, managers, educational administrators, and nonsupervisory employees. These observations and experiences have been documented. Numerous evaluative opinions have been sought and discussed with all levels of employees and business owners and/or chief executive officers (CEOs) about PDM. After considerable debate--often on moral principles--the conclusions generated too often lead to a reconceptualization of PDM as a condescendingly gratuitous management

exercise intended as a pacifier to convey a sense of power, significance, importance, and influence when none of these actually exists. This definition may be operationalized contextually in tandem with the literature.

In this paper, the terms PDM, participation, and participative management are used interchangeably and are defined to include "high employee involvement," "high participative management," and "participative leadership," all of which require sharing and delegating power. This usage specifically recognizes human dignity as the legitimizing factor of the participatory exercise. Thus, PDM is defined as a means to an end: the genuine recognition of the professional status of coworkers which includes their ability to share power, control, and influence in a collaborative, colleagial learning exercise as professional coequals in the organization and management of a standing organizational system toward the desired end--human well-being.

Self-Regulating Autonomous Work Groups. Autonomy in work groups is a component of the STS/QWL system. Self-regulating autonomous work groups are groups or teams of workers who, collectively, have the responsibility of and the skill for carrying out their work responsibilities without seeking higher authority for their decisions. The increases in efficacy resulting from learning and increased decision-making conbribute toward higher performance and satisfaction of personal needs, and, thus, to human well-being.

Human Well-Being. As used in this paper, human well-being is also part of one of the definitions of QWL. Human well-being ". . . is the experience of intellectual, emotional, and physical pleasure through

one's own effort. The same policies which contribute to human well-being are also those most consistent with human, organizational, and political effectiveness" (Herrick, 1981, p. 631).

Redundancy of Parts. Redundancy of parts is an organizational design principle agreed upon and identified by Emery (1983) and Trist (1967) as the foundation of technocratic bureaucracy. This principle typifies the mechanistic simplification of task, machine, and worker that treats the worker as an unthinking and uncaring expendable human being.

Redundancy of Functions. Redundancy of functions is a second organizational design principle agreed upon and identified by Emery (1983) and Trist (1967) and characterizes the underlying philosophy of the STS concept. This principle acknowledges the utilitarian nature of component systems. The uses of the systems are adaptive and thus evidence flexibility. As human beings, individuals or groups of individuals are considered to be purposeful systems. As such, they have the human capability to exercise internal control in the form of self-regulation, and to confront rapid changes, increased complexity, and environmental uncertainty.

Effectiveness. Definitions of effectiveness vary. Kanter (1984, p. 22) defined it as "productivity"; Drucker (cited in Kanter, 1984, p. 22) as "doing the right thing"; and Herrick (1981) as "controlling one's working environment, performing one's job, meeting the goals of the organization through increasing one's skills and abilities, and cooperating with one's fellow workers" (p. 625).

For the purpose of this paper, the terms effective, effectiveness, and human effectiveness will be used interchangeably to refer to

education and productivity in Herrick's sense. Contextual definitions of effective schools or effective schools movement that relate to bodies of literature other than STS/QWL remain subject to the reader's interpretation.

Quality Education. Most researchers, social scientists, or efficiency advocates tend to define quality education, excellence, or school success with a narrow focus on fixed prescriptions, formulas, and standards of perfection (Lightfoot, 1983, pp. 22-25, 381; Wirth, 1983, p. 202). Quality education, according to Lightfoot, is reconceptualized as "goodness" (p. 22), and, to Wirth, as "the good school" (p. 154). In the Wirthian sense, the good school ". . . requires that teachers and students be present to each other with the wholeness of their persons. It means a willingness to recognize a committed effort from each" (p. 154). Lightfoot's definition is compatible with Wirth's and the STS/QWL concept also. Lightfoot defined a good high school as something that can be neither described nor measured by a single indicator. She is concerned with the ethos, not with individual or even combined elements. The whole is more than the sum of its parts, which include not only measurable and observable elements, but also those subtle nuances that can only be observed by those in their own contexts and may not be transferable to another (pp. 23-35). For the purpose of this paper, quality education is defined in the Lightfoot and Wirthian sense as a perceptual outcome.

Ethos. Included in Lightfoot's (1983) definition of goodness used in this paper as the definition of quality education is the definition of ethos as "the subtle and complex combination of dimensions that cannot

be disentangled for discrete, quantitative measurement and analysis, but which have an enormous impact on the vigor and cohesion of the school" (Rutter, Maughan, Mortimore, and Ouston cited in Lightfoot, 1983, pp. 36, 381).

Paradigm. Paradigm is used throughout this paper to identify a new field of inquiry that attracts a group of scientists to engage in scientific activity, that field of inquiry being concurrently unlimited in types of problems for these scientists to resolve (Kuhn, 1970, p. 100). Acknowledging Kuhn (1970), Ferguson (1980) defined a paradigm as "a framework of thought [from the Greek paradigma, 'pattern'] explaining certain aspects of reality," and added that "although Kuhn was writing about science, the term has been widely adopted" (p. 26).

Paradigm Shift. Kuhn (1970) describes paradigm shift as a change in which ". . . scientists adopt new instruments and look in new places, . . . see new and different things when looking with familiar instruments in places they have looked before" (p. 111). Ferguson (1980) defined the term simply as ". . . a new way of thinking about old things" (p. 23).

Problematique. The term problematique in the STS lexicon describes a situation or condition, in whole or in part, as an increasingly precarious "tangle of mutually reinforcing old and new problems, too complex to be apprehended by the current analytical methods and too tough to be attacked by traditional policies and strategies . . . plaguing all nations whether developed or developing, whatever their political regime and social structure" (Batkin, Elmandjira, and Malitza, 1979, p. xiv, cited in Wirth, 1983, p. 246).

Leader. The literature indicates a number of definitions and nuances for the term leader. For the purposes of this paper, the leader is defined as that person whom other persons will follow as a result of their position, inspiration, need, greed, or for satisfaction and recognition of some internal incentive or unnamed motivating factors.

Leadership. In common usage, leadership may refer to a group of leaders, the position of the leader, an office, the ability to be a leader or to lead, or the term of office of a leader. For the purposes of this paper, the common usage is accepted. In the context of STS/QWL, the definition includes the nuance of shared or participatory leadership.

Context of the Study

A study involving the Boston Public Schools cannot ignore the turbulent background of the events relating to desegregation in the legal, political, and economic senses during the decade preceding the year of this study. The historical perspectives must be kept in mind by the reader in order to understand the case study background, planning, and findings, as well as the legal, political, and economic issues impacting the schools.

In the late 1940s and early 1950s, a renewed awareness in racism resulted in a national civil rights movement. In 1961, the National Association for the Advancement of Colored People (NAACP) concluded a study of the Boston Public Schools confirming the existence of de facto segregation and unequal educational opportunity for black children (Allen, 1978, p. 11). In spite of the evidence presented, the Boston

School Committee (BSC) denied the claims of the NAACP.

The course of events from 1961 through 1972 were characterized by: school boycotts against placement of black children in formerly all-white schools; nonproductive communication and discourses between the NAACP and the BSC; enactment of the Racial Imbalance Act in August, 1965; "Operation Exodus," founded in 1965, that eventually bused over 600 children, grades K-10, throughout the city; a state-funded program, Metropolitan Council for Education Opportunities (METCO), busing black children to suburban schools; and continued denials by the School Committee that segregation and educational deficiencies existed in spite of public outcries to the contrary.

In March, 1972, the NAACP filed a class action suit on behalf of the black students in the public schools for violation of the students' civil rights. The case, Tallulah Morgan et al. v. James W. Hennigan et al. (1972), was heard in the Federal District Court, Judge Arthur W. Garrity presiding. In April, 1974, two years after the suit was filed, both the BSC and the State Board of Education were found guilty of noncompliance with the Racial Imbalance Act and were ordered to prepare a desegregation plan to be implemented by September, 1974, in two phases.

Phase 1 of the desegregation plan included busing and began on September 14, 1974. When the schools opened, buses moved children to schools outside their neighborhoods. Despite the concentrations of police presence throughout the city, racial violence broke out in both black and white communities, and fearful parents, both black and white, kept many children at home. Indeed, the specter of full-scale violence prompted President Gerald Ford to place the 101st Airborne Division on

alert for possible assignment to the city. "The City of Boston is out of control," editorialized the Boston Globe in October, 1974.

In December, 1974, the stabbing of a white pupil by a black pupil in South Boston High School resulted in that school's temporary closure. The police, who were already assigned full-time duty inside the high school, preferred that it remain closed for the year. The faculty, torn between closure or remaining open, generally chose the latter on the basis of professional principles. This high school went into federal receivership from December, 1975, to January, 1983, when the federal responsibilities were transferred to the Massachusetts Department of Education. As indicated in Chapter 3 of this study, the researcher was assigned to this high school during this time.

Phase 2 of the desegregation plan, ordered by Judge Garrity in September, 1975, included a reorganization of the school system and established university pairings, or partnerships. Nine school districts were created to ensure a mixed racial attendance balance. The ninth district, which included both older and newer schools, was designed as a "magnet" school district, with each magnet school offering a different theme. Parents and students could elect to attend the school offering the theme they chose. The federal court intended the magnet schools to demonstrate that the themes could reflect the quality of the schools and that those schools could be balanced peacefully. One of the magnet schools was Central High School, the oldest public high school in the country, whose designated theme was the visual and performing arts (Peterkin, 1981, p. 60). Central High School is discussed in Chapter 4.

The second significant aspect of the Phase 2 court order was the pairing of the public schools and the universities and colleges of the Greater Boston area into individual school-college partnerships. Firms as well as cultural organizations and institutions in the private sector joined in the efforts of Judge Garrity and the court-appointed experts to build a support system for the beleaguered schools by drawing on the community's resources. Programs and activities to support these initiatives were funded under Chapter 636 of the General Court of the Commonwealth of Massachusetts.

Not part of the court order, but funded under Chapter 636, one such collaborative between the University of Massachusetts School of Education and Central High School was operational in January, 1976. The collaborative focused on teacher and administrator staff needs, addressing school improvements with graduate level courses taught by university professors. The program was later to evolve as the Boston Secondary Schools Project (BSSP) and to expand to include several city high schools. In the early 1980s, several headmasters and administrators collaborated with the University of Massachusetts in developing a team approach to school improvement projects, with the team for each school led by its headmaster. At the close of the 1970s, the school system had a tenuous stability.

However, more turbulence followed. Concurrent with the announcement of the collaborative program, the superintendent of Boston schools was fired. The crisis was summarized in a Boston Globe article on June 21, 1981, by John Powers, that appeared on page 1: 1,000 teachers were scheduled to be laid off; teachers in the system were dispirited;

three superintendents were appointed in a single year; a school committeeman was indicted for extortion; school bus drivers went out on a three-week strike; anxiety about whether the schools would remain open for the 180-day school year lasted for five months; 500 teachers were reassigned at least twice, and 1,000 teachers, at least once. Stability was voided. The situation was compounded when a limiting tax initiative, Proposition 2½, passed into law and limited school board autonomy, and by the rising popularity of privatization of education offered by the federal government. Also looming on the scene was the specter of federal cuts in education funding.

In August, 1981, a new superintendent of schools, Robert Spillane, was appointed by the school committee. He was later to be dubbed "Six Gun" as a result of his "shoot first, check or not check on it later" approach. The perception of many practitioners was that the new superintendent's primary mission was to be tough and break the union and administrators' organizations. He did establish "get tough" policies for problem students and system personnel as well as fiscal controls and city-wide curricula, but his contribution toward developing morale was negative.

Eight years after the court order desegregating the schools took effect, much controversy still existed, and it still continues among both blacks and whites. On March 12, 1982, a Boston Globe poll was published indicating that 89 percent of the parents of the black children preferred an open enrollment policy. On March 21, 1982, the Boston Globe quoted Assistant Attorney General William Reynolds' statement of his position: "Busing has been a failure. It has spurred 'white flight,'

it has failed to improve the quality of education, and it has divided the country" (p. 23).

National attention had focused on the situation for a number of years. A Wall Street Journal article ("Classes in Chaos," May 13, 1982, pp. 20-21) touched on many of the problems that had continued up until April 1, 1982: assaults, including the shooting of a girl and the use of a razor blade on a school aide; a 200 percent increase in pupil costs; a projected deficit of $73 million; reduced federal aid; poor fiscal controls; teacher and security guard layoffs; wrecked teacher morale; the regeneration of racial division resulting from the apportionment of layoffs resulting from court-ordered compliance with maintaining a 19 percent employment rate of black teachers that affected white teachers at a ratio of approximately 4 to 1; and textbooks and supplies either in short supply or unavailable. The article pointed out that, as if the deficits cited were not enough, two black members of the school committee were battling the superintendent over the issue of a larger role for minorities in a system with an enrollment of over 70 percent blacks and other minorities.

Adding to the negative media chorus, the Boston Globe, in a 13-part series (June, 1982), questioned the benefits of the court-ordered desegregation plan. The series indicated a number of shortcomings and concluded that: Assaults, robberies, extortions, etc. were common occurrences; vocational education was inadequate; the needs of special needs students were not being met; Boston school attendance rates were the lowest of the major cities in the United States; one-third of the students failed two or more courses; teacher absence was excessive;

courses being taught by improperly trained teachers; guidance services were inadequate; and supplies and textbooks were often not readily available. Augmenting this series, Dean Hubert Jones of the Boston University School of Social Work, a desegregation activist, added: "The current condition of the Boston Public Schools has been made possible by the legacy of detachment and indifference by civic leaders and a city culture ripe for breeding corruption, divisive politics, and institutional racism. The costs to the citizens of Boston, particularly its schoolchildren, are incalculable" (Boston Globe, July 9, 1982, p. 11).

This brief historical background provides a context for the study. The turbulence of that period foreshadowed the turbulent setting for the case study made during the following school year. The study is presented in Chapter 4, where the history and background of Central High School will also be presented.

The professionalism of Boston teachers is attested to by their continued efforts toward professional growth by participation in the BSSP and other professional development endeavors. In spite of the perpetual, omnipresent turbulence of Boston public schools, the differing opinions of court-ordered busing, and, more often than not, lack of leadership, a significant core of dedicated teachers and some administrators carried and continue to carry the school system, providing their own leadership in futile attempts to improve the quality of their working life and the quality of education. Two lines from a poem by A.E. Housman, "Epitaph on an Army of Mercenaries," are appropriate here: "Their shoulders held the sky suspended. They stood, and the earth's foundation stay" (Housman, p. 280). To this may be added, reflective of the dedicated

core and the pupils: Theirs are the shoulders of giants upon which we all ride.

Overview of the Study

Chapter 2 reviews the literatures from those fields of knowledge upon which are formulated a theoretical basis for a discussion of the problem of this study, the implications and the purpose of this study, and identification of those elements that offer to improve the QWL of an urban secondary school. The literature is presented in five parts. The introduction contains a discussion of the heuristic approach and theoretical rationale provides the basis for selecting the literature reviewed. This is followed by a selective examination of some of the circumstances surrounding the evolution of the current educational system, including practices, approaches, and the actors involved. The leadership literature presents theoretical and practical perceptions of the various researchers and practitioners in the private and public sectors. This section is followed by a review of participative decision-making presented in the same format as the leadership section. Both the literatures of leadership and participation were randomly selected from larger collections.

The selected models and practitioners were separated from their original placements in the review of the literatures to create a section that forms a segue into the assessment of the theoretical and evaluative position developed in the remaining section: the alternative STS/QWL paradigm. This section scrutinizes the evolution of the STS concept and

the development of the concept building blocks. The STS/QWL developments in the private and public sectors of the United States are then examined, and the subsequent movement in public school education is indicated. An analysis of the obstacles and implications related to STS/QWL change efforts in the private and public sectors, including education, follows. Finally, the elements offering to characterize the stated purpose of the study, suggested by the literature and the researcher's experience as necessary in offering an alternative STS/QWL paradigm, are presented. The section concludes with a summary of the researcher's position.

In Chapter 3, the rationale for the case study method, the research method of this study, is detailed and referenced. Introduced and referenced are the evaluative perspective of the STS/QWL concept and the context for generating evaluative knowledge for reflective and critical discourse in the hermeneutic sense appropriate to the STS concept and the study.

The evaluative base of the delineation of the results of the study is then given. The entire follow-up interview framework is detailed, amplifying the interviewer, subjects, questions, and instrumentation categories, as well as participant observation and the resultant quadrangular role of the researcher as participant/observer. The inclusion of content analysis, archival documentational and analysis is explained in relation to this position. This chapter contains additional features clarifying the study, such as Design, Content Analysis, Document Analysis, Sources, and Data Analysis.

Chapter 4 presents, in five parts, the STS/QWL paradigm as an alternative, operational, high employee-involvement system and the

results in Central High School. The five-part approach was chosen to develop a sequential framework that facilitates understanding of the problem and its interacting dynamics, from the initial planning through the incremental levels of implementation to the results.

The results of the follow-up, open-ended interviews reflect on the year of study, interview responses, and attitudes, in addition to presenting results and responses to questions designed for the researcher's interest in STS/QWL.

Part 1, "Historical Background of Central High School," the case study, presents the history of the school, and contextual background of the school problems, and stakeholder perceptions.

Part 2, "STS/QWL Planning to Implementation," includes: the researcher's background and planning; the roles of the new headmaster and of the researcher while assistant headmaster; the method by which the goals and objectives were developed; the design of an organizational structure for STS/QWL values and process to which the stakeholders could relate and, consequently, which they could accept and operationalize; and, finally, presentation of STS/QWL to the stakeholders.

Part 3, "Implementation, Process and Evaluation," presents the implementation, process, and evaluations of the process, each treated separately but considered as interdependent, each a coproducer of the other. The discussion of implementation deals with the institution and operationalization of the STS/QWL paradigm. The discussion of process includes delegation, both formal and informal face-to-face interviews, and constant evaluation. This discussion also reemphasizes the inclusion of hermeneutic, reflective, and critical discourse to convert

conflict to cooperation and collaboration, and the institution of the Responsibility, Accountability, and Communication (RAC) Center and its guidance system, Legality, Amenities, and Communication (LAC). All of these could lead to further modification.

Part 4, "Institutionalization and Diffusion of the STS/QWL Concept and Characteristic Elements," presents the application of STS/QWL concept and characteristic elements as garnered from the literature reviewed in Chapter 2, as well as the use of hermeneutic, reflective, and critical discourse in the experience of the study year. Characteristic elements are offered to define improvements in the urban secondary school situation; the usefulness of the hermeneutic, reflective, and critical discourse; and evidence as to the inadequacies and problems with application of the STS/QWL paradigm. The effect of contaminants on the results will also be considered.

Part 5, "Ethnographic Summary with Interview Selections," presents an analysis of the follow-up interviews of selected stakeholders, specific to the interview schedule; STS/QWL characteristic elements; and study-elected criteria. Comparative analysis will be made, as appropriate, of the year of study and follow-up interview results. These results are discussed in Chapter 5.

Chapter 5 discusses the results presented in Chapter 4. The implications for practice and recommendations for school restructuring are discussed as a caveat to maintenance of the current traditional model of education. The strengths and weaknesses of the study are discussed in consideration of recommendations for future research. Finally, the researcher discusses his reflections of the year of study and follow-up

interviews in all his roles.

CHAPTER 2

REVIEW OF THE LITERATURE

Introduction

This chapter provides a review of the literature from the worlds of education and of business, which act as the basis for the researcher's theoretical formulation of the discussion of the problem, the implications and purpose of this study, and the identification of those elements that offer to improve STS/QWL of an urban secondary school.

The purpose of the literature review was to formulate a position offering an alternative to traditional urban secondary school management and organization. The rationale for deciding which bodies of literature to examine was based on two specific assumptions:

1. The reform reports have indicated that public school education needs reforming--again.

2. The constant stream of literature and the leadership exhortations about effective schools, effective leaders, effective teachers, and quality education indicate a need for reform. Implicit in these exhortations is the perception that the reason schools are not effective is that the school principal is not a strong leader and, mainly, that the teachers are not participating sufficiently to make a measurable contribution to developing an effective school.

These assumptions are the basis of the decision to examine here the evolution of leadership, educational leadership, and participative decision-making (PDM). The review of selected participatory models

included was a by-product of this examination. The researcher's purposes were not satisifed by the research in leadership and participation, nor by finding a solution to the problem through the usual examination of organizational development, human relations schools, literature on morale, and traditional or classical structures. All these had been previewed in other formats. The rationale for rejection was and is based on over thirty years of experience in the public and private sectors. The lack of satisfaction with and intuitive rejection of bodies of literature led to further research into the STS concept, whose characteristics have been practiced in the private and public sectors. The intuitive rejection can be supported by Kanter's (1984) statement: "Clearly, we cannot use the organization of the 1890s to solve the problems of the 1980s" (p. 43).

The relationship and similarities between the structure of the modern secondary school and the structures of business organizations is apparent throughout. The historical section reveals the roots of this relationship.

The review of leadership literature examines theories, research findings, and perceptions in education and business. Research shows that management and leadership are often synonymous. This review includes a cross section of perceptions of leadership in theory, business, and education.

The review of literature on participative decision-making provides a perspective of research and a brief citation of reviews on school models: the humanistic value system, school-based management, local models, effective schools, and alternative schools, including a summary

judgment on hierarchical schools by an urban alternative high school headmaster.

The review of literature on the STS/QWL paradigm explores its historical origins and development in business and industry, ideological and pragmatic influences, and the involvement of government and of political and social institutions. This section also shows its application in public education, and the obstacles to and implications of these applications.

Evolution: The Current System

Tyack (1974) traced the evolution of the school model from the community school of rural America, identified with and controlled by the community, to the hierarchical factory model with its "top down governance" and to the corporate model of vertical segmentation (p. 40).

Educational reformers, frustrated by the lack of control and coordination of community schools, were impressed by the efficiency of the factory model. Seeking a single best system of education, they developed a technology for education. The standardization of the bureaucratic model required the use of impersonal rules, uniform procedures, and uniform standards of performance and evaluation, and promised the absoluteness of power, the prestige, and the seeming stability of the factory. Professional educators became an interlocking directorate of "urban elites" and, by a network of formal and informal communication, achieved national solidarity (Tyack, 1974, p. 42). The power over the schools was transferred from the community to the outside professionals,

with administrators at the top of the hierarchy and the teachers, who had little formal training, as subordinates (Tyack, 1974).

In 1904, at a National Educational Association meeting, both sides of the ideological struggle were presented: the ideal of democracy and educators, which emphasizes a humane treatment of workers, and the industrial ideal, which subordinates workers as inhuman parts of production. Margaret Haley, a paid organizer for the Teachers' Federation, called attention to the "increased tendency toward 'factoryizing' education, treating teachers as automated factory hands carrying out orders of those in authority who may or may not know the needs of children or how to minister to them" (Tyack, 1974, pp. 256-257). Aaron Gove, superintendent of Denver schools, expressed the conviction that teachers were hired to follow orders, and that they should not take part in the decision-making process (Tyack, 1974, pp. 152-157).

This autocratic and condescending attitude still exists in many modern school administrators. The concept that effective education depends on more effective control of teachers results in simplistic and piecemeal reforms (Backarach and Conley, 1986; Goodlad, 1984).

The Corporate Model

At the turn of the century, as businesses grew larger and more difficult to control, the hierarchical factory model developed into the corporate model, "a complicated vertical segmentation of the labor force" (Bowles and Gintis, 1976, p. 184). Schoolmen immediately adopted the corporate model for school governance. The typical modern high

school is, like the corporation, organized both by hierarchy and department.

The influence of business interests and "the triumphant ideology of 'efficient management'" was pointed out by Callahan (cited in Bowles and Gintis, 1976, p. 44). As a result, the administrator was oriented not toward quality of education, but toward cost saving and control; the teacher was a worker, accountable to the administrator; and the student was an "object" measured by standardized tests (p. 44).

The key element of the corporate model was the power of the superintendent to influence major decisions of the school board (Marburger, 1985, pp. 4-5). The power of superintendents was increased by the vast bureaucratic structure created by the Roosevelt Administration to deal with the problems caused by the Depression of 1929.

Politics and Pluralism

As a businessperson and as a practitioner, the researcher is aware of the consequences of politics in urban schools and schooling. The struggle for power and control of school has, since the turn of the century, involved the same actors. The "politics of pluralism" involved the professionals, the teachers, who aligned themselves with the political system, and the community (Tyack, 1974). In urban communities, racial pluralism, bilingualism, and biculturalism gave rise to a struggle for power and control between native Americans and immigrants and between the working class and the economic elite. Reformers, whose

ostensible purpose was to take politics and corruption out of schools, often had "an anti-immigrant animus" and a hidden agenda to impose their values on the schools (Tyack, 1974, p. 103). Working people "managed to get the kind of education demanded only when their needs coincided with those of the economic elite" (Bowles and Gintis, p. 230). The goal of the politicians was to appease their constituencies, not to view the schools as tools for Americanization.

Although anti-bilinguistic and anti-immigrant feelings were prevalent, the whites in these communities were able to make gains in preservation of their cultures in the schools. The blacks, however, "had to fight for crumbs" (Tyack, 1974, p. 110). In reality, two public school systems existed across the country, one for whites and one for blacks.

For the variety of students crowding into the schools, and for the needs of the economy for specialized manpower, the Philbrick one best system was too rigid. The goal of "administrative progressives" was to correct the system by using the science of administrative efficiency and professional specialization (Tyack, 1974, p. 180).

Teachers were becoming better educated and, consequently, dissatisfied with their roles as "functionaries" in a dehumanizing corporate structure. Administrators talked of cooperation, democratic administration, and professionalism, but often manipulated teachers to arrive at predetermined management conclusions and used evaluation forms that placed a premium on "conformity, group thinking, and cooperation" (read "obedience"). They "learned to co-opt rather than to dictate to teachers," and later dealt with assertiveness punitively (Lawrie, 1970, p. 754; Tyack, 1974, pp. 256-278). Hansen (cited in Marburger, 1985,

p. 85) noted that, when the authority to make decisions is centralized at higher and higher levels, those who are charged with carrying out these decisions often circumvent or ignore them. In this context, it is interesting to study the struggle of the teachers to seize power over the quality of their work lives through unions and professional organizations (Tyack, 1974, pp. 180-182).

Goodlad (1979) summed up the problem of improving the schools:

> . . . schools will be better if legislators, school board members, parents, and superintendents see themselves as responsible and accountable for enhancing the effectiveness, unity, and sense of mission of the single school. This may mean passing less rather than more reform legislation, reducing rather than increasing district-wide programs and demands, giving more rather than less autonomy to principals and teachers, and using contextual as well as outcome criteria as measures of successful performance. (p. 346)

Leadership Perspectives

Yukl (1982) reviewed major theories and findings on managerial leadership and determined their relevancy to principals of primary and secondary schools. According to their preferences, researchers have dealt with three major areas of study: (a) the "trait approach," (b) the "power influence approach," and (c) the "behavior approach." Yukl (1982) believed that situational theories cut across these approaches.

Situational Theories of Leadership

Yukl (1982) noted that, over the past two decades, research in leadership theory has focused on the impact of the situation upon leadership behavior (p. 19). The nine situational theories presented by Yukl are:

1. Fiedler's contingency model, which measures leader effectiveness with the favorableness factors of three situational variables: (a) leader-member relations, (b) position power, and (c) task structure. Fiedler attempted, in 1967 and 1978, to explain leader attitude by a "Least Preferred Coworker" (LPC) score (Yukl, 1982, pp. 19-21).

2. The Hersey and Blanchard situational leadership theory, which evaluates leadership effectiveness by measuring one situational variable, the "situational maturity," of the subordinate, and two aspects of leadership behavior, "task behavior" and "relationship behavior."

3. House's path-goal theory of leadership, which explains that the most rational function of the leader is to increase personal payoffs to subordinates for work-goal attainment and to make the path easier to travel (House, 1971). In a later version, House identified four categories of leadership behavior (House and Mitchell, 1974).

4. Yukl's (1982) multiple linkage model of leader effectiveness, not a formal theory, which deals with the impact of short- and long-term influence factors of situational variables upon group performance.

5. The Kerr and Jermier substitutes for leadership theory, which deals with "substitutes" and "neutralizers" as situational variables that decrease the need for managerial leadership.

6. Osborne and Hunt's adaptive reactive theory, which focuses on the impact of fixed situational aspects on the leader's "discretionary" and "nondiscretionary" behavior.

7. Vroom and Yetton's normative model of participation, which analyzes the impact of the quality of the leader's decision on the group.

8. Stewart's role requirements and constraints, which are determined by (a) the operational style of the manager, (b) the type of work the manager is involved in, and (c) the extent of the manager's exposure.

9. House's charismatic leadership theory, which is consistent with and based upon relevant evidence previously collected in other disciplines.

Yukl (1982) recognized that it is important that leaders use appropriate procedures in decision-making, citing Tannenbaum and Schmidt (1958), Mair (1963), and Vroom and Yetton (1973). He found, in the nine theories discussed, inconsistencies in the number and type of situational variables tested and concluded that these theories are important as resources for study rather than as sources for definitions of leadership effectiveness.

Yukl (1982) suggested integrating the behavioral consequences into a taxonomy of leadership behavior (pp. 42-43). Although the conclusions about leadership effectiveness in business do not necessarily apply to leadership effectiveness of school principals, their roles have many similarities (p. 44). Yukl concluded that leadership theories and concepts require more testing and fine tuning so that their implications would be less speculative (p. 54).

Charismatic Leadership

Charismatic leadership is the quality of leaders who, by force of their personal abilities, can command the loyalty and devotion of their followers that inspires them to accomplish outstanding feats without

hesitation or question. The original meaning of charisma was "gift" and carried an aura of magic. Contemporary charisma is the result of conscious psychological manipulation in an age of mass communication (Duttweiler, 1981, p. 20). The charismatic leader often represents a break with the established order and reveals a transcendent mission acted upon by followers because they believe their leader is extraordinarily gifted (Dow cited in House, 1976). References to the "leadership myth" or "great leader syndrome" appear several times in the literature.

House (1976) hypothesized testable personal characteristics of the charismatic leader as dominance, self-confidence, need for influence, and moral righteousness. Specific behaviors of the charismatic leader are hypothesized as goal articulation, role modeling, personal image-building, demonstration of confidence in and high expectations for followers, and, finally, mature arousal behavior (p. 25). Johns (1983) suggested a lesson plan for high school students designed to help them understand the charismatic leader, who "stands in the wings with supreme confidence, ready to provide the answers and make all the decisions" (p. 22).

Lawrie (1970) presented anthropological and cultural mythology and human psychology as reasons for the acceptance of the leadership myth. These early influences give rise to a set of rules that become "statements about what a 'good' leader 'should be'" (p. 752). Lawrie (1970) indicated the consequences of these rules for the followers, the leaders, and the organizations when the charismatic leader makes a mistake, and suggested a diagnostic leader model with the following prerequisites: (a) rejection of the mindset that motivation is charismatically

transferred from the leader to the follower; (b) realization that motivational variables are always present in a follower; (c) realization that goals must be aligned between leader and follower; and (d) realization that the leader must provide an environment that does not stifle the real motives of the followers. The diagnostic leader must be evaluated in terms of the subordinate's growth. In the environment of the diagnostically oriented organization, the subordinate, too, "comes to share the responsibility for 'making his organization 'a great place to work'" (pp. 750-756).

Power is not an essential qualification of the charismatic leader (Duttweiler, 1981, p. 13). In contemporary terms, however, power is part of strong leadership. Yukl's research (1982) indicated that the leader's effective use of power is the result of his or her skill in diagnosing situations (p. 10). French and Raven (cited in Yukl, 1982) defined five kinds of power: (a) Reward Power, (b) Coercive Power, (c) Legitimate Power, (d) Expert Power, and (e) Referent Power.

Leadership from a Business Perspective

Geneen, CEO of ITT, distinguished between management, an objective function, and leadership, a subjective one (Geneen and Mascow, 1984, p. 133). Grove (1983), president of Intel, measured leadership by the results achieved "by a group either under his supervision or under his influence" (p. 141). The manager must work as hard as his or her subordinates and must remain involved after responsibility has been delegated (Geneen and Mascow, 1984, p. 152; Grove, 1983, p. 52; Kanter, 1984).

DeVille (1984), a business executive, suggested that though managers lament about employee disloyalty and lack of commitment, management teams reinforce the level of performance from the employees (pp. i-ii). DeVille points out that adequate pay is not sufficient motivation to increase productivity, adding that leadership deals with people, while administration deals wtih resources (p. 160). Human needs include esteem, participation in important activities, and rewards for working hard. Good managers using a Balanced Management Style of Leadership can capitalize on human needs to create the team effort identified as a "Community of Achievers" (pp. 25, 195).

Leadership Effectiveness in Education

In the organizational structure of top-down management that exists in most schools, the principal is the single most influential individual in the school community of parents, students, and teachers. The staff/employees are the recipients of instructions. The teachers' decision-making responsibility is reduced "to that of making up lesson plans and dealing with day-to-day problems of educating a classroom of youngsters" (Marburger, 1985, p. 10).

Snyder (1976) addressed perceptions of school leadership among future elementary school principals. Pfleging perceived the effective principal as a delegator of managerial responsibilities to the assistant principal and a leader in instruction and curriculum (cited in Snyder, 1976, p. 24). Cerra discussed the passive, dictatorial, and facilitative styles of leadership when dealing with change, concluding that the facilitative style, which allows for teacher-principal interaction, is

the most productive (cited in Snyder, 1976, pp. 32-33). Dermody suggested the principal assume the perspectives of others in the school, interacting with students, professional and nonprofessional staff, and parents (cited in Snyder, 1976, pp. 22-25).

Lightfoot (1981, 1983) described two charismatic principals of urban high schools. One, basing his role upon his notions of participation and collaboration, believed a school leader must have a tremendous sense of dedication, be humanistic, be knowledgeable, be intelligent, have a strong physical presence, and, finally, be a very "flexible person, open to compromise and suggestions" (Lightfoot, 1983, pp. 67, 69, 71). The other principal, who recognized his potential shortcomings, used the power of his position. He was an autocratic leader committed to order as a prerequisite to effective education. The benefits he offered to the teachers did not stop the complaining (Lightfoot, 1981, pp. 20, 29).

The principal has been characterized as the "principal teacher" [emphasis added] whose task as leader is not to be the housekeeper, but to assess "what is possible at a given moment and what is not" (Sarason, 1971, pp. 116, 198; Sizer, 1984, p. 198). English (1975) asserted that principals can "establish a climate in which professional teachers grow" but do not have to be super teachers (pp. 20-21).

Peterkin (1981) identified four types of charisma and examined the role of the administrator of an urban high school "for the impact and value of charisma and organizational management on leadership" (p. iv). To Peterkin, as to Yukl (1982) and Lawrie (1970), the problem of administration is deciding between the use of charisma and the formal management model, or "informed charisma" (Peterkin, 1981, p. 126).

O'Malley (1979) pointed out that energy-driven charismatic leaders often lose perspective "in their enthusiasm and energy for keeping their program going" (p. 153).

Perceptions of Change

In his insightful work, The Culture of the School and Problem of Change, Sarason (1971) focused on the principal as the leader of the school, the initiator of change, and the implementor of external change initiated from central offices. Change efforts must focus on the system, but this focus too often bypasses how change would affect the classrooms. ". . . We stand a good chance of demonstrating that for the child; the more things change, the more they remain the same" [emphasis added] (pp. 111-112). When school leadership comes from the teacher rank, there are both positive and negative consequences. The justification that "without sustained teaching experience, one simply cannot know what a school is all about" may be offset by the fact that teachers who have been leaders of children may not be able to become leaders of adults, and that teachers' perceptions of the principalship "may be antithetical to being an educational leader or vehicle of change" (pp. 112, 115). Sarason explained the situational variables under which a principal's role is shaped and limited by analyzing the situation of a newly-hired principal (pp. 116, 118-119).

Boyer (1983) suggested a training program and, with others, recommended an autonomous role for principals and staffs for "decisions that properly should be made at the local level" (pp. 221, 227). Boyer's

position subscribes to the STS/QWL movement.

Boyer (1983), Cetron (1985), and Peterkin (1981) found that principals often lack adequate preparation and need training to manage the process of change. Walker (1987), however, applied the humanistic approach successfully to overcome school problems.

In our information society, experiences in business management models will be available to public school systems. Cetron (1985) predicted that school management will change as business management models change, and discussed the emergence of a diagnostic resource manager, mentioned by Lawrie (1970), whom teachers will accept since they will be part of a "decision-making team" (p. 131).

In The Future of Public Education, Lieberman (1960) pointed out that, although teachers know that "school systems and institutions of higher education are in the best position to initiate and carry through educational reforms," they look to educational administrators to provide leadership (p. 212). Lieberman argued that representative organizations should provide leadership. Over twenty years later, Shanker motivated the American Federation of Teachers (AFT), which he continues to head, to provide this leadership.

The research and writings reviewed here point to the necessity of strong leadership in the school and greater follower involvement in decision-making. However, Naisbitt (1982) commented, "We have no great captains of industry anymore, no great leaders in the arts, in academia, in civil rights, or in politics. This is because we followers are not creating those kinds of leaders anymore" (pp. 107-108).

It is suggested here that perhaps "strong leadership" is not the

domain of a single entity, but that attention should be directed toward a coequal model of leadership capable of adaptive and flexible management options. Perhaps the persons closest to the work, the teachers, are better placed to respond with flexibility when the "leaders" move on.

Participative Decision-Making

Business Perspectives

The private sector has invested heavily in the participatory decision-making process for a variety of factors, including the decline of productivity and the growing pressure of international competition in the 1970s (Herrick, 1985b, p. 965). Evidenced is the increasing pressure placed on management for more participation by younger and more highly educated workers, and, as a result, an emerging networking system, which offers a communication base "rooted informally in equality" (Naisbitt, 1982, p. 221; Taylor, Rosen, and Pratzner, 1982, p. 21). Kanter (1984) found that, if participation is initiated by management, especially in a segmentalist company, success is reduced (pp. 244-247). The integrative company, according to Kanter, is key to innovation and change (p. 27). Kanter offers the parallel participative organization as an innovation and change tool for long-range success (p. 200). In addition, Kanter argues for a balance in management involvement and more team options (p. 277). In his discussion, Herrick (1985c) credited Kanter with coining the term "parallel organization" and then defined it as "a permanent system of linked labor management committees . . . [that] mirror the primary organizational structure" (p. 7). According to Herrick (1985b),

the enlargement of the scope of socio-technical systems intervention by parallel organizations has major implications for organizational research (pp. 980-981).

Teachers' Perceptions

Alutto and Belasco (1973) observed three trends in the research literature:

1. Teachers' desires for increased participative decision-making.

2. An assumed conflict between the professional goals of the teacher and the system structure.

3. Theories of organizational effectiveness through participation.

Alutto and Belasco (1973) established three patterns of teacher organizational participative decision-making: (a) decisional deprivation, (b) decisional equilibrium, and (c) decisional saturation. They concluded that ". . . the great need in schools is still in the direction of increasing the level of teacher involvement" (p. 138). The conclusions of Pitkoff (1981), Best (1975), and Conway (1976) agreed with those of Alutto and Belasco (1973) in that most of the respondents in their studies felt decisionally deprived and fewest felt decisionally saturated (p. 136).

Participative decision-making is clearly related to job satisfaction (Finch, 1978; Hewiston, 1978; Yarborough, 1976). The importance of the decision to be made as a significant factor in participation was discussed by Pitkoff (1981), Bartunek (1979), Gips and Bredeson (1984),

and Young (1979). In a comparison of participation and satisfaction with attitudes toward collective bargaining, Freeman, Martin, and Roney (1980) found a positive correlation with satisfaction and decision-making. Young and Jennings-Wray (1979) argued for decentralization to involve teachers in curriculum decision-making.

Bartunek (1979), Schmuck and Blumberg (1969), and Finch (1978) examined the factor of teacher training as an enhancement of increasing participation skills and the relationship between participation and productivity. Ambrosie and Heller (1972) argued for training programs for administrators to recognize teacher participation (p. 13). They found that teachers' perceived participation is not significantly affected by the authoritarian or nonauthoritarian behavior of the principal, but is encouraged when the principal stresses goal orientation (p. 10).

Goldhammer (1967) and Schmuck and Goldberg (1969), differing from most of the researchers, concluded that teachers, in general, are not motivated to participate in community or educational decisions beyond the immediate classroom problems but are content to let the boss do it (Goldhammer, 1967, p. 9). Riley (1984) found a positive relationship between the actual and the desired participation of teachers, between district size and participation, and some indication, though inconclusive, between academic levels and participation. The principal, as the leader of the school, encourages teacher participation depending upon the expectations of his or her immediate superiors (Gorton, 1971, p. 326).

Empirical research does not reveal the high frequency of teacher participation postulated in theoretical studies. Imber and Duke (1984)

suggested three types of empirical research addressing "What is?" "What is possible?" and "What should be?" (p. 31).

Leadership and Participative Decision-Making: Models and Practitioners

System change in the schools directly affects the principal's role as leader.

Humanistic Value System

English (1975, p. 20) argued that the principal is the change agent and can deal with the conflict among all participants in school organizations by establishing a humanistic value system. English compared the Punitive Value Orientation toward school administration with the Humanistic Value Orientation; the former cannot bring about school system changes (pp. 8, 11). The principal has both power and influence, but effects of the changing times are that "there is no longer any question whether [the principal] will decide to involve other groups" (pp. 24-26). The students, in their dealings with the principal, are treated by a rigid system as a faceless entity (p. 35). In a humanistic value system, the principal "is sympathetic, understanding, and open, and . . . can force the school to become more open and effective with students" (p. 37).

School-Based Management

Marburger (1985, p. 13), a practitioner of democratic decision-making, proposed School-Based Management (SBM) as an attempt to decentralize the governance of schools. According to Marburger, SBM is a

bottom-up process of governance and recognizes the parents' right to be involved in their children's schooling. Under SBM, the principal must learn to share decision-making power. SBM is best implemented by an SBM Council with members from the entire school community that will set guidelines for all parties, including the superintendent and the school board. As the director of the Urban Studies Center, O'Malley had an equal voice with his staff in its governance (O'Malley, 1979). According to O'Malley, the energy needed for keeping the program going "cannot be garnered by administrative fiat. It must be willingly provided by the endorsement of the participants" (p. 15). Peterkin (1981) also suggested sharing of power with students, teachers, and parents to counter top-down decision-making (p. 129).

Herrick (1985c) urged the application of the principles of parallel organizations, which evolved out of labor-management experiences, to SBM. These innovative principles would include a system of interlinking committees extending down to departments and classrooms, would be representative, and would integrate all partners (p. 9).

Local Models

Crockenberg and Clark, Jr. (1979) reported on the successful San Jose Teacher Involvement Project (TIP), in which classroom teachers were trained to participate with building principals. Relevant conclusions drawn by Crockenberg and Clark, Jr., were that, although some areas of conflict developed, participatory decision-making by teachers would enhance the teachers' and the school's effectiveness and that ". . . TIP was not an attempt by teachers to take over and run schools without

principals" (p. 118).

Jennings-Wray (1979) added another dimension, concluding that democratic participation must be accomplished by changes in the socio-economic climate (p. 95).

Effective Schools Model

Edmonds (1979) argued for the effective schools model. Cuban (1983) cautioned that the effective schools model not be used "as a hammer to pound out a solution" (p. 696). Mackenzie (1983) and Eubanks (1982) held that teacher participation is important to the effective schools model.

Neufeld, Farrar, and Miles (1983) found that research on effective secondary schools programs can be implemented at the high school level (Miles, Farrar, and Neufeld, 1983; Neufeld, Farrar, and Miles, 1983). However, participative decision-making should be "integral to the process of creating an effective school culture" [emphasis added] as well as in change implementation (Purkey and Smith, 1985, p. 359). The validity of case studies of effective schools as empirical models was challenged by Ralph and Fennessey (1983). However, the effective schools model was supported by Mackenzie (1983), who argued that effective schools case studies are being supported by descriptive and evaluative literature. Cuban (1983) cautioned that "test scores alone are not, in and of themselves, indicators of effectiveness" (p. 696). Miles et al. (1983) concluded that effective schools program implementation at the high school level should be studied more (pp. 42-43).

Alternative Schools Model

Fantini (1983) and Naisbitt (1982) both argued for alternative schools. A study of alternative schools by Barkhurst and Wolf, Jr. (1979), revealed that the apparent success of the programs, which had a typical longevity period of about four and one-half years, resulted from grass-roots initiatives and active communication processes, preferably informal and unstructured. Success factors indicated by Raywid's (1983) study are the element of choice for both pupils and teachers and the high involvement level in controlling decision areas. Raywid also found a high morale rate and a 90 percent satisfaction rate of program ownership (pp. 684-688).

The Traditional Hierarchical Model

Peterkin (1981), as a headmaster of a traditional urban magnet high school with alternative programs, recognized the role of proactive administrators and cited their need to suspend reliance on the traditional hierarchical model and to "examine the possibilities of educational options and more flexible organizational structures" (p. 56).

LeGendre (1979) directed a Teacher Center in the high school where Peterkin was headmaster. The Center's governance model provided for various levels of participation, and 87.4 percent of the teaching staff participated. Significantly, in view of some research on leadership monitoring of delegating activities, the role of the headmaster was passive. LeGendre argued that "the principal, though supporting the Center and its programs, should not assume an openly active role in Center operations" because the principal's presence would tend to

mitigate the teachers' sense of ownership and thus endanger the Center's neutral ground (p. 142). This contrasts with the shared active governance in the Urban Studies Center, where O'Malley, the staff, and students developed a near formal constitution that governs the administrator as well as the others involved (O'Malley, 1979). According to O'Malley, the democratic decision-making process has kept the Center a "viable educational option" (p. 154).

The Alternative Paradigm: Socio-Technical Systems/Quality of Working Life (STS/QWL)

Quality of Working Life (QWL) is a label most commonly used and misunderstood to identify an alternative paradigm of work organizations (Pratzner and Russell, 1984; van Beinum, 1984, 1986). The STS/QWL paradigm qualifies as a scientific paradigm (Mohrman and Lawler, 1981, p. 10; Tuthill and Ashton, 1983, p. 7). It embraces an alternative philosophy, a definite set of values, and a variety of methods of designing jobs and organizations in the contextual sense of organizational democracy (Trist, 1981; van Beinum, 1986, pp. 7, 22).

Credited with introducing the QWL label for the socio-technical systems are Davis (1977, cited in Trist, 1984) and Bluestone (cited in Kanter, 1984), but other synonymous labels exist: Quality of Work (QOW), Democratic Socio-Technical Work System (DSTS), Employee Involvement (EI), Worker Linked Democracy, and Organizational Democracy. Experts and professionals do not agree on common definitions for the labels, activities, and processes (Pratzner, 1984; van Beinum, 1986).

Jenkins (1981) stated that the key elements of STS/QWL characterize the organization as an open system: a socio-technical system that embraces the structure of jobs, the people who work the jobs, the technologies involved, and the interactions between these and other factors such as contiguous parts of the organization, supervision, and management roles (p. 12).

The definitions aim at improving the socio (human)-technical (economic) sides of human reality (Wirth, 1983). Some characteristics of STS/QWL are: the focus on jointly improving productivity and the psychological outcomes of work (Goodman, 1979, p. 8; Pratzner and Russell, 1984, p. 3); the economic value of work viewed as a means to increasing human well-being (Herrick, 1981, p. 631); bringing human values to the workplace which accentuate positive performance on the job (Rosow, 1981, p. 27; Appendix B); emphasizing the human dimension in the relationship between the worker and his or her working environment (Davis, 1977, p. 53); the concrete expression of particular sets of beliefs and values and a concern with the quality of life in society (Mansell and Rankin, 1973, pp. 9-11).

Van Beinum (1986) attempted to clarify the definitions:

> The social and technical systems are interdependent and complementary. Designing a work organization which is effective and adaptive means . . . codesigning the technical and social systems in such a way that they accommodate and support each other. . . . There is a shift from the traditional, fragmented and dissociating one-person, one-task structure to the development of semi-autonomous and self-regulating work groups . . . of people who collectively have the responsibility and the skill to manage a set of interdependent tasks which together form a natural whole. . . . QWL is a new organizational paradigm, which integrates the democratization of work and the economic performance of the organization. . . .

> The current use of QWL includes such practices as quality circles, job enrichment, profit-sharing, union-management collaboration, and various forms of parallel structure. Most of these are unrelated to the conception of organizational design and the democratization of work. (p. 7)

Trist (1981) and Goodman (1979) agreed with van Beinum's qualifications.

Measurement and Evaluation

QWL measurement follows a methodology of evaluation that differs from quantifiable scientific methodology. Emery (1983, p. 2) argued for a "commonsense" approach. Reich (1983) and Stone and Burlingham (1986) concurred that performance can neither be monitored nor evaluated through simple accounting systems. Reich (1983) added that "in flexible-system production, the quality of work is often more important than the quantity" (p. 49). Chapter 3 will amplify the discussion of measurement and evaluation of STS/QWL.

Conceptual Origin and Developments

Trist (1981) provided the framework for the research into the origin and development of socio-technical system concept. The STS/QWL paradigm evolved from active research projects involving autonomous work groups that was conducted in coal mines by the Tavistock Institute of Human Relations, England, in 1950. As a result of observations, the researchers postulated that the social and technical systems constituted "a new field of inquiry" (Trist, 1981, p. 7). During the 1950s, studies continued to support the positive relationship between conflict reduction, self-regulating groups, job satisfaction, and, usually, constantly higher productivity. One major finding was that individuals given choices

could develop a "major design alternative" (Trist, 1981, p. 9). Although the findings were positive, the business and industry climate was inclined toward the "technical imperative" (Jenkins, 1981; Trist, 1981). The emerging work mode highlighted the redundancy of various levels of management that were required for segmented control. Principles evolved for selecting the best match to guide the fit between the socio-technical systems and the three interrelated levels of work systems: primary work systems, whole organization systems, and macrosocial systems (Trist, 1981). (See Appendix C.)

Serendipitous Influences and Conceptual Developments

Reflective evaluations provided STS researchers with serendipitous retrospective influences. Anthropological and historical considerations indicate that the "material and symbolic culture of a society were interconnected in a net of mutual causality" (Trist, 1981, p. 13). From the historical context, observations were made of the operationalizing of the social-technical systems in World War II by the Germans coupling the man and the tank. Noted also was the high success rate of small group formations, which were both flexible and cohesive under pressure. Noted in addition was the selection of officers for these groups who were capable of assuming open and democratic roles. These success observations led to further research into leaderless groups allowing for leadership to emerge, operate, and rotate under various conditions, therapy groups, group dynamics, and group decision-making. More research followed in examining unconscious factors inhibiting group purposes and as a result of participation and performance superiority of the democratic model.

Conceptual developments continued with a generalized model reformulated for the Norwegian Industrial Project (NIDP) to show the joint optimization of both dimensions of social and technical systems. Optimizing for either system singularly would constitute a suboptimization of the whole.

Scandinavian Developments

The NIDP addressed the theory and methodologies for alternative models to the hierarchies (Herbst, 1976, p. 17). Joint participation between the union and management involved focusing on research, studies concerning work redesign which involved reviewing industrial engineering and inviting group participation in developing system changes (Davis, 1957; Emery and Thorsrud, 1976; Hackman and Lawler, 1971). A prerequisite for the redesign was the involvement of all stakeholders concerned with redesign at all levels of participation development, including the persons directly involved with implementing recommendations, the job owner (Emery and Emery, 1974, 1976, pp. 157-158). However, the expected diffusion of the NIDP into other industries did not take place. It was not until the mid-sixties that diffusion began in the United Kingdom Shell Philosophy Project, Sweden, and West Germany.

The Primary Work System

Researchers into early socio-technical systems concepts and methods began their intervention in the design of the work systems with the primary work system--the organizational building block (see Appendix D). Trist (1981, p. 35) defined the work system as ". . . a functional system with a semi-independent operational identity whether as a

production or service unit." Trist (1981) credited Emery for characterizing six intrinsic needs of workers for job satisfaction (see Appendix E) and for comparisons with extrinsic characteristics (see Appendix F), and also credited Emery with developing principles of work design in mass-production systems (see Appendix G).

Autonomy in work groups is a component of the socio-technical system. The assumption of the theoretical efficacy of autonomous work groups is that the greater the control of variables controlled by the group, the better the results and the satisfaction of the group members (Weiner, 1950). Autonomous groups increase their efficacy as learning systems, expand their decision-making capacity, and the increase in efficacy contribute toward higher performance and satisfaction of personal needs (Emery, 1983; Gyllenhammer, cited in Wirth, 1983; Sherer, 1986). However, several caveats were cited for autonomous groups by Kanter (1984, pp. 260-264).

The emergence of the matrix group and its correct use in response to integrated systems technology was discussed by Herbst (1974) and by Peters and Waterman, Jr. (1982).

Self-standing groups in larger contexts represent a holistic approach to organizational structures wherein the whole organization is represented in the part. According to Trist (1981), open-system planning is one solution to the problem of retaining small groups within the large to realize advantages of both (p. 37).

Herrick (1985b) explored the implications of parallel organizations in unionized settings related to socio-technical systems theory. Parallel organizations were defined by Herrick (1985b, p. 979) as

"metapractices." The limitations of the concept of parallel organizations presented by Krim (1986) are that it does not anticipate the resistance that these groups are likely to experience, that the framework offers little guidance for what to do when the "new creation" fails to live up to its promise, and that dilemmas are created because the new parallel organization must interrelate with two traditional structures, union and management (p. 150).

Whole Organizational Systems Development

Researchers into the development of whole organizational systems postulated that joint optimization requires different principles than those required by the traditional model. Emery (1983) and Trist (1967) identified two design principles to guide reorganization:

1. The principle of redundancy of parts. It dictates that the worker be treated as an unthinking and uncaring expendable human being. Trist (1981) saw it as the foundation of technocratic bureaucracy.

2. The principle of redundancy of functions typifies the thinking of flexible and adaptable systems of the components of the organization. Trist (1981) said that organizations subscribing to this principle are deemed capable of withstanding the impact of rapid change, ongoing intricacies, and environmental instability (p. 38).

The social environment was found to have baffling effects upon organizational planning (Emery and Trist, 1973). Therefore, Trist (1981) separated the wider social environment from the organizational environment and called it contextual. Trist (1981) categorized four types of environment: "random placid," "placid clustered," "disturbed-reactive,"

and "turbulent field." The turbulent field is characterized by higher levels of interdependence and complexity, which constitute a higher level of uncertainty. In Wirth (1983), "the turbulent environment is man himself. . . ." (p. 30). According to Trist (1981), the turbulent field cannot be absorbed by the technocratic bureaucratic model (p. 40).

In the 1960s, social science researchers studying new plants found that primary work systems were consonant with the design principle of redundancy of function. The principle identified by Herbst (1974) as the "minimum critical specification" allowed gradual involvement of all stakeholders at all levels. To this point, sanction, stakeholder involvement, implementation methods, and joint optimization of the socio-technical systems had become part of the socio-technical design (Trist, 1981, p. 41).

The old paradigm lacked the capability of responding to a turbulent environment (van Beinum, 1980). America has not made the shift from standardized production to flexible-system production as explained by Reich (1983, pp. 49-50). Trist (1981) summarized a comparison of the old and the new organizational paradigms (see Appendix H). Diffusion of the new paradigm in established organizations must deal with established structures and the desire of management and workers to accept change. These constrictions relate to the discontinuity of change (Rosow, 1981; Trist, 1981). Methods for redesigning STS/QWL change have been presented by both Trist (1981) and Mansell and Rankin (1983). In the new paradigm, the bargaining process is viewed as a method of offering win-win situations in collective bargaining.

Change Strategies

The socio-technical system requires continuous, unpredictable process of change involving values and principles. Weick (1979) stated that change requires a vision of a possible alternative mode (Weick, cited in Trist, 1981, p. 48). Trist (1981) suggested the steps for change based on his projected theory of appreciation-planning-implementation: evaluation at the highest policy-making levels, site selections as to where the changes should begin, and final selection involving the workforce in the process as soon as possible. At this point, Emery's deep slice-task forces may constitute the levels of employees. "Ownership becomes an obvious by-product" (Trist, 1981, p. 46).

Ferguson (1980) and Trist (1981) discussed the emotional and intellectual difficulties of accepting change. The positive and negative aspects of employing so-called expert change agents or facilitators, who have had low success because of low trust levels, were discussed by Jenkins (1981) and Trist (1981). The new role of the change agent is as a contributor in a co-learning process. The paradigm for alternative organizations requires "democratization of the relations of those concerned with organizational change" (Mansell and Rankin, 1983, p. 49).

Macrosocial-Level Developments

Unacknowledged by many is the macrosocial transition from the industrial era to the information-electronic era. Ignored is the turbulent environment and man's role against man as the mechanistic past breaks down. Trist (1981) described the process of transforming first

the primary work system and then the whole organization system, which also involves the socio-technical process at the macrosocial level.

The expanded uses of electronic technology create increased person-to-person interaction and accelerate changes in socio-technical systems involving all the dimensions of human life. Decentralization of structures across America results from questioning the economy of scale and the advantages of decentralized small units in conserving and securing resources. Reorganization from the hierarchical management structure to horizontal, including the offering of the home as an alternative workplace, results in a network of primary work systems as independent businesses linked to others in a network (Kanter, 1984, p. 162; Naisbitt, 1982, p. 220; Trist, 1981, p. 52). Technological choice involves the global community: The technology must fit the circumstances of the physical and social environment, and a democratic control mechanism is needed to regulate technological progress (Trist, 1981, p. 53). Wirth (1983) concluded that revolutionary technologies of the twentieth century "will change human experiences in ways we can but dimly surmise" (p. 251). Alternative product lines resulting from employee-generated initiatives that have been profitable enhance workers' positive feelings. Employees' perceptions of the end-use product as harmful, petty, or destined to fail result in negative impact on workers (Trist, 1981).

Socio-technical research is needed in monitoring emerging technological alternatives, participation in selected action research projects, and establishing explicit criteria for making choices (Trist, 1981, p. 53). Wirth (1983, p. 245) emphasized global priorities, citing a concern with a widening human gap between global problems (<u>the world</u>

problematique [emphasis added]) and human insights (Batkin, Elmandjira, and Malitza, 1979).

The interdependencies in industry systems are an "organizational ecology," and no one system can succeed without the other systems (Trist, 1977b). Problematiques are best served at the "domain," or single organization, level, in reducing turbulence (Trist, 1983).

Community-based socio-technical endeavors, such as those communities and individuals who have rallied to attract economic projects, are an American innovation (Davis, 1983-1984; Trist, 1981). The plywood industry in the Pacific Northwest, among other nationwide examples, reflects a community resolve that resulted in the employees owning and running their companies (Bennett, 1979).

Networks in the unbounded sense are created as vehicles of communication and diffusion. A networking system dealing with labor-management and innovation features was developed among ten American cities to enable them to participate in sharing and developing learning capabilities through programmatic theme centers, rather than a prescriptive process. National networking was entered into with most of the provinces in Canada in a wide political program. Although the program was rejected by the Canadian Labour Congress and the provincial governments, peripheral networking took the place of formal recognition. The QWL Centre has been established by the Ontario government with a joint labor-management advisory committee (Trist, 1981).

United States Developments

The STS/QWL movement in the United States has been gathering momentum since 1973, when General Motors (GM) and the United Auto Workers Union (UAW) signed a letter of agreement (see Appendix A for text of letter) employing STS/QWL principles (Stone and Burlingham, 1986, p. 47; Wirth, 1983, p. 49). The STS/QWL paradigm addresses additional issues of the ways people in America organize themselves for work and production, and to changes in the attitudes and composition of the workforce (Pratzner and Russell, 1984; Stein, 1983). Experimental alternatives to the hierarchical structure are not new, according to Bernstein (1976, 1979) and Stein (1983).

Ideological Causal Strands

The intensifying participative mode in workforce attitudes described by Naisbitt (1982) and Rosow (1981) has replaced the old ideology of F.W. Taylor's scientific management (Pratzner and Russell, 1984, p. 12). One among the many reasons advanced for the popularity of the scientific management paradigm is the composition of the labor force in the late 1890s. Prevailing attitudes regarding racism and classism enabled managers to ignore the issue of equity in the workplace (Smith, cited in Pratzner and Russell, 1984). Evidence that Americans have internalized the ideology of democracy includes the demands for high levels of participation in institutions and activities that affect their work and lives (Pratzner and Russell, 1984, p. 9). A time of change that will promote the individual as a human system in a decentralized society has been envisioned by Ferguson (1980) and Wirth (1983). Carnoy, Shearer,

and Rumberger (1983) argued that an alternative to the "palpably false" perception of the American economic system as self-governing is attainable: a democratic, participative governance of polity and economy (p. 2). Naisbitt (1982) pointed to the intensifying participative mode of Americans in choosing the local and initiative petition route to self-governance as evidence that the participative ethic is permeating American thought processes (pp. 176-178). Rosow (1981, p. 17) summarized changing workforce attitudes as the perceived right of workers to participate in decisions affecting their jobs. Changes in the structure of business and industry are described by Naisbitt (1982) and Reich (1983). In schools, this translates to the need to change the organization of schools and schooling in order to satisfy the ideological trend. Involving stakeholders--especially teachers and pupils--in the participative leadership process is expected to offer improvements in the quality of working life and the quality of education.

Pragmatic Causal Strands

Early STS/QWL approaches addressed pragmatic issues of morale and satisfaction, such as job enrichment, incentives, and profit-sharing, and virtually ignored productivity-related issues (Davis, 1984, p. 13; Trist, 1977a, p. 4). Increases in productivity were being reflected in European and Japanese economics (Rosow, 1981, p. 17). In America, problems inherent in and related to low productivity are evident (Pratzner and Russell, 1984, p. 13).

A similar decline of the American education system and urban secondary school is witnessed by the reforms indicated later in this review.

Structural Changes in Business and Industry

Literature supports structural changes in American business and industry to respond to the competitive environment of a global economy (Naisbitt, 1982, p. 54). In American education, the master economic institutions are reflected in the inflexibiilty of the schools to respond to turbulence. Standardization remains the basic educational approach in the American school.

Reich (1983, p. 45) argued that the central problem is that "the nation is not moving quickly enough out of high-volume, standardized production," and explained flexible-system production as

> . . . rooted in discovering and solving new problems . . . requires an organization designed for change and adaptability . . . the tasks involved . . . are necessarily complex. . . . The work requires high-level skills precisely because the problems and opportunities cannot be anticipated. . . . Workers' performance cannot be monitored and evaluated through simple accounting systems. . . . The quality of work is often more important than the quantity. . . . Problem-solving requires close working relationships among people. . . . Much of the training . . . occurs on the job. . . . Individuals' skills are typically integrated into a group whose collective capacity becomes something more than the simple sum of the members' skills. (pp. 49-50)

Trist (1981), Davis and Sullivan (1980), and others share most of these perceptions.

Human Resource Changes

The STS/QWL paradigm is committed to the joint optimization of the human factor and the productivity factor in a participative mode. The significance of human resources is emphasized by Rosow (1981, p. 19) and a report by Work in America Institute (1985, p. 5).

Demographic, attitudinal, and value changes are having a dramatic impact upon the workplace. Demographic changes include declining birth-rates, an aging population of baby boomers, later marriages, deferred childbearing, smaller households, and the entrance of women into the American work force (Daggett, 1984, pp. 2, 3; U.S. News and World Report, 1985, p. 66). High educational attainment results in high expectations of the baby boomers in self-fulfilling terms of what the workplace can do for them (Cooper et al., 1979, p. 124; Davis and Sullivan, 1980, p. 8).

The role of minorities is a serious problem impacting the work force. In terms of human resources, minorities may constitute America's last untapped natural and economic resource. Employee shortages are perceived by Pratzner and Russell (1984, p. 16) as a motivating influence upon employees to redesign the workplace to attract minorities, and also to become involved in basic skills education for the disadvantaged in preparation for workplace status.

Job satisfaction and expressions of self-fulfillment in productivity are consistently supported in the literature. Hackman and Oldham (1980, p. 5) and Levitan and Johnson (1982, p. 28) perceive that scholars are overly concerned with job satisfaction. According to Trist (1981), most of the literature on job satisfaction attaches "too much significance to responses given at only one point in time--especially to questionnaires" (p. 32). However, employees experiencing feelings of powerlessness and not achieving satisfying job levels by managers and employees are correlated to problems of physical and mental health and safety (O'Toole, 1975, p. 28; Staines and Quinn, 1979, p. 7). Employee powerlessness

frequently turns to work avoidance schemes such as absenteeism, sabotage, theft (Hackman and Oldham, 1980, p. 18). Lying is another major problem (Bok, 1979, p. 24; Stone and Burlingham, 1986, p. 50). New family models will emerge, and needs for leisure time will compete with the workplace for satisfaction (Bart, 1974; O'Toole, 1973; Rosow, 1982, p. 17).

Underutilization and Underemployment

The QWL paradigm aims to solve the problems of underutilization and underemployment of human resources in the workplace. These conditions are the result of treating workers as unthinking and uncaring parts of the production process. When people work at less than their full capacity, the result is worker expressions of dissatisfaction and, in turn, lower productivity (F. Pratzner, personal communication, December 24, 1986; Pratzner and Russell, 1984). Huddleston (1982) attributes underemployment of American workers to lagging productivity because of the declining international competitiveness of the United States, which shifted leadership and highly skilled jobs to world markets overseas (p. 7). O'Toole (1975) perceives underemployment as a persistent situation that will intensify job dissatisfaction. Reindustrialization as a viable solution has been discussed and rejected by Naisbitt (1982, p. 56). Burch (1981) called the idea the "reindustrialist illusion" and stated that America is dominating the "thoughtware," not the hardware, field (pp. 12-14).

Rosow (1981, p. 17) reported the loss of confidence by Americans by their leaders, decline in their confidence in business, and a redefinition by young workers' of their perceptions of authority roles

accompanied by a demand to a right to participate in decisions affecting their work. Bluestone (1979) noted this also.

A subtle transformation is taking place in America from planned obsolescence of consumer goods to demands for quality foreign goods as a result of the awareness of resource scarcity (Rosow, 1981, p. 18). American society is in transition (Trist, 1977a; Wirth, 1983).

Developments in Business and Industry

STS/QWL approaches were attempted prior to the 1970s, as referred to in the literature reviewed thus far. In the early 1970s, two significant QWL developments occurred: the landmark cases of workplace democracy at the Harman Industries plant in Bolivar, Tennessee, and at the General Motors (GM) plant in Tarrytown, New York.

The Bolivar QWL experiment was a major learning exercise and illustrated how conscious effort can develop and implement work changes in accordance with Maccoby's (Herrick and Maccoby, 1975) socio-technical philosophy of work design: Maccoby's principles of (a) security, (b) equity, (c) individuation, and (d) democracy. (Security and equity were existing union principles.) The Ladder-Type Structure Evolved for the Bolivar (TN) QWL Experiment is shown in Figure 2.1. This structure was supported by Irving Bluestone, vice president of UAW, and Sydney Harman, president. The advisory group included Maccoby, Einar Thorsrud of the Norwegian Democratic Project, and Neal Q. Herrick (Wirth, 1983, pp. 46, 66).

The Tarrytown QWL experiment at the GM plant is rated as the most significant in the United States (Walton, 1979, p. 91; Wirth, 1983,

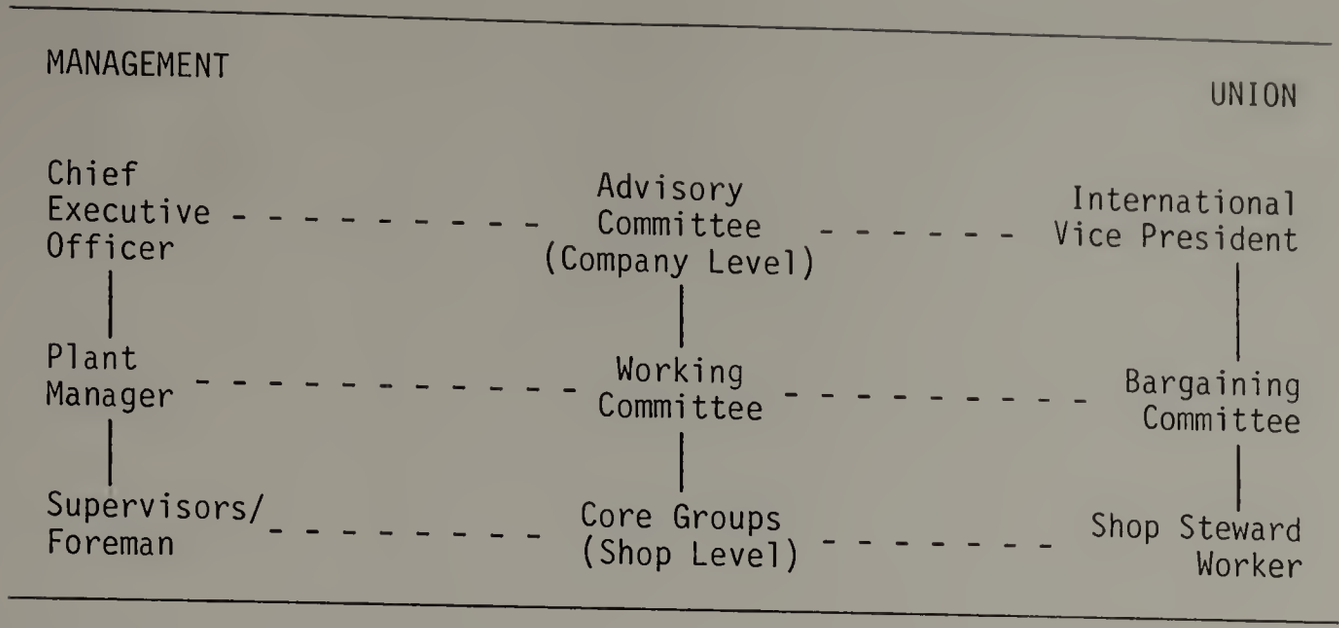


Figure 2.1. Ladder-type structure evolved for the Bolivar (TN) QWL experiment. [Solid lines indicate traditional union/management relations; broken lines reflect new relations.] (Wirth, 1983, p. 46)

p. 51). The Civil Rights Movement, the Women's Movement, the Vietnam protests, and the challenge of younger workers to union and management authority signaled the plant manager that a philosophical change was needed (Wirth, 1983, p. 51). The "letter of agreement" signed by GM and Bluestone of the UAW into the National Collective Bargaining Agreement in 1973 introduced into GM Quality of Work Life Approaches [Appendix I], and Basic Principles of the Quality of Work Life Effort [Appendix J] (Carlson, 1978, pp. 15, 21-22).

Other major corporations are engaged in STS/QWL activities, and the list is growing (van Beinum, 1986; Walton, 1985).

Obstacles: Management and Union/Workers

The perceptions of many managements, union leaders, and workers are obstacles to the STS/QWL movement and its operational outcomes. Strong

negative feelings against QWL generate questions about who wants or needs QWL, the motives that underlie the introduction of QWL, and the fear of power-restructuring and control from both sides of the human dimension.

Management Obstacles. Management obstacles to the STS/QWL movement are significant to QWL development. They are made up of attitudes that the value of worker participation is minimal, and of fear of surrendering power (Jenkins, 1980; Rosow, 1981). Management fears are accentuated when many managers consider surrendering salary and status, receive perceptual messages that fewer levels of management will be needed, and anticipate exposure of their failures. When group decision-making replaces top-down, one-man decision-making, the conventional wisdom of hierarchical organization is further threatened, and fear of sharing power mounts when the actual participation process includes sharing ideas. The threat to lower management is the perception of the diminished status of all supervisory roles from leaders' to coordinators', where errors will be charged to them. In economic terms, management tends to be impatient with the long-term process of STS/QWL and desires immediate, short-term gains (List, 1985, p. 67; Mansell and Rankin, 1983, pp. 23, 50).

Union/Worker Obstacles. Union receptiveness toward QWL processes has gradually grown since the landmark GM-UAW letter of agreement in 1973, which was followed by other major unions in the 1980s. Many union leaders fear STS/QWL processes because (a) they are defensive against perceptions that they are identifying with management (Davis, 1977; List, 1985); (b) some are not willing to share power with other members of the union (Mansell, 1980, p. 24); (c) some view QWL activities as a

union-busting activity (Heckscher, 1984, p. 14); (d) some attribute a "hidden agenda" to QWL processes; and (e) some suspect the presence of academics and behavioral science consultants (Mansell, 1980, p. 5). An analysis of productivity has shown that psychology can make significant improvements in productivity if psychologists are willing to work with individuals who must be "sold" on the value of psychological insights (Katzell and Guzzo, 1983, p. 472; Tuttle, 1983, p. 485). However, Rosow (1981) points out that 75 percent of American business is not unionized, and QWL is not restricted to unionized companies (p. 22). Evidence was cited that union and management interests are converging (Jenkins, 1981, p. 31). Collaboration as a relationship was recognized as distinct from the adversarial relationship between management and labor (Trist, 1981).

Trist (1981), Jenkins (1981), and others agreed on the need for third parties who can avoid the usual role of the "expert" and assume the role of the co-learner in the new process, thus earning the trust and respect of constituencies.

Involvement of Governmental, Political, and Social Institutions

Davis (1977), Trist (1981), and Rosow (1981) discussed national and local government initiatives, including the Occupational Safety and Health Act, the Environmental Protection Act, the Equal Employment Opportunity Act, and initiatives taken by the Departments of Commerce and Labor, the National Science Foundation, and the National Center for Productivity and Quality of Working Life. Federal interest intensified with hearings held before the Subcommittee on Civil Service of the Post Office and Civil Service, House of Representatives, Ninety-Seventh

Congress Session (H.R. 3116) in 1981.

State and local government initiatives have made some slight advances by designating their personnel departments as "Human Resource Offices."

Public institutions have conducted significant research. The National Productivity Commission, organized in 1970 and reorganized a year later as the National Commission on Productivity and Work Quality, conducted Project Network, cosponsored by the U.S. Civil Service Commission, Office of Personnel Management, IPA Program, and the Department of Housing and Urban Development. The Management and Behavioral Science Center (MBSC), Wharton School, University of Pennsylvania, conducted research called "Improving Productivity and Quality of Working Life in the Public Sector: Pioneering Initiatives in Labor-Management Cooperation," which included the Jamestown Community Self-Renewal Project cited by Trist (1981).

Private institutions include the National Center for Quality of Work, Washington, D.C.; the Work in America Institute of Scarsdale, New York; and the Center for Quality of Working Life, Institute of Industrial Relations, University of California, Los Angeles.

Higher Education interfaces with STS/QWL in two broad categories of course work and research. Many universities enhance and diffuse the process of STS/QWL by offering courses and research in STS/QWL theory and practice for industry.

Panacea or Fad

Although in many instances quick-fix managers perceive STS/QWL as the "in" thing, researchers stress that it is not a panacea (Mansell and Rankin, 1982, p. 64; Scotton, 1983, p. 1; van Beinum, 1985). Nor is it a passing fad (Bennett, 1980, p. 15). According to Jenkins (1981), evidence continues to accumulate that STS/QWL "will become more influential, not less" (p. 49). In education, progress has been slow. However, the recent Swedish/American Project on Participation appears to be a landmark breakthrough in American education experiences with STS/QWL.

Another STS/QWL approach is evidenced by the Career in Teaching Plan implemented by the City School District of Rochester, New York, and the Rochester Teachers Association.

Public Education: Movements, Obstacles, and Implications

The American business community has addressed and continues to address modern malaise with its own STS/QWL approaches and activities. The problems of industry in the 1960s and 1970s are reflected in a similar decline of the American education system and urban secondary schooling (Pratzner and Russell, 1984; Reich, 1983). STS/QWL has been and is offered as a solution to American public school reform to satisfy ideological trends.

Backarach and Conley (1986, p. 642) argue for reform of school management. This is consistent with STS/QWL philosophy. Daggett (1984) reported that flexible restructuring of vocational education revealed that future workplace challenges were applicable to the entire educational system. However, during the first wave of reform, reports

focused on the goals of more effective education rather than the diagnosis for reconstruction of schooling (Gross and Gross, 1985; Herrick, 1985c). The second wave of reports dealt with professionalization of teachers, improvement in the quality of educational management and working conditions, and restructuring schools (CED, 1985; NGACRA, 1986). The CFEE suggested four interdependent changes in teacher participation and school leadership that will contribute toward operationalizing a STS/QWL philosophy: (a) teacher discretion and autonomy; (b) collegial styles of decision-making and teaching and centrality of Lead Teachers qualified by advanced teacher certificates from a new National Board for Professional Teaching Standards; (c) support staff for teachers; and (d) consideration by school districts of a variety of approaches to school leadership (p. 56). A five-year national policy study on the productivity and the quality of working life of teachers has been funded by the Metropolitan Insurance Company (Work in America Institute, 1985, p. 8).

Pipho (1986) pointed out that school reforms are influenced by the political environment and the resulting fiscal issues. A legislative leadership change may cause ownership of the reform movement to pass to the participants--"teachers, principals, administrators, and local boards of education" (p. 351). The significance of the teachers' sense of ownership was discussed by Sizer (1984, p. 184). Professionalizing teachers and putting them in charge of instructional decisions will lead to experimentation with new kinds of school management (Shanker, 1986, p. 15). Effective change must include the total organizational system (N. Herrick, personal communication, February 7, 1987; Sarason, 1971).

The variety of interrelated factors preclude prescriptive solutions; they are not endorsed by STS/QWL (Purkey and Smith, 1985, p. 360). However, as Herrick wrote, the definition of "the total organizational level" can apply to the individual or, if need be, the universe. Through observing conditions at the microlevel, "we discover the minimal changes which are necessary for general success" (Herrick, cited in Pratzner, 1983, p. xi).

Herrick (N. Herrick, personal communication, February 7, 1987) reported one "paired" joint participative management experiment involving all the stakeholders in a system-change approach that is in the start-up stage in Detroit, Michigan. STS/QWL system change has been foreshadowed in Massachusetts by the Boston Secondary Schools Project (BSSP), a collaborative program between the School of Education at the University of Massachusetts/Amherst and the Boston Public Schools. The BSSP model uses a team approach to school problem-solving. University staff and many enrolled doctoral candidates intuitively endorse the STS/QWL principles of delegation, self-regulating autonomous groups (teams), equity, security individuation, democracy, and total system approaches. Higher education, in addition to research and course offerings mentioned earlier, can socialize its members into a particular type of organizational paradigm (Mallinger and Elden, 1985, p. 1).

Professional teachers associations or unions can find STS/QWL a liberation from abject, dehumanizing subordination to self-regulation and a self-fulfilling experience in new learning (Wirth, 1983, p. 181).

The obstacles to STS/QWL in public school education are presented by the presence of school boards, superintendents, centralized bureaucracies,

school administrators and administrators' professional organizations, teachers unions and associations, the pluralistic community, and, of course, the business community. In Boston, the federal court is an additional presence, indirect but pervasive. The problem is compounded when sanctioning of STS/QWL develops into problem-solving groups and committees (Herrick, 1983; Trist, 1981).

Review of the literature on the STS/QWL concept implies that "for schools to play their most effective role, they need support and modeling from the master institution--economic life" (Wirth, 1983, p. 245). Genuine high participation and shared leadership in schools requires:

1. Education. One of the characteristics of the STS/QWL paradigm is education (Emery, 1983; Herrick, 1983; Striar, 1980). Just as shared leadership in the workplace requires the employees' knowledge of management skills, so, too, does shared leadership in schools require the teachers to share their knowledge with the members of the school community. Pratzner and Russell (1984) support this position. High participation requires a knowledge base of all the interdependencies of the school, not only in the liberal arts sense, but inclusion of the neglected areas of business principles, psycho-social needs and processes, and group dynamics.

2. Management skills. As professionals, teachers need to share their experiences and knowledge with the entire school community, including the pupils. The STS/QWL sharing principles recognize the faculties and students as coworkers (Herrick, 1983).

3. Research and development. Research is a characteristic of STS/QWL. A open climate that encourages questions that lead to research

makes investment and ownership realities. At present, educational research in various forms is "policy" in several states (Frank, 1986; Rauth, 1986). Improvement in morale, job satisfaction, and performance becomes evident.

4. Restructuring of management. The turbulence of contemporary life calls for a transition from a highly structured system to a flexible system of management (CFEE, 1986; NGACRA, 1986). This restructuring recognizes the basic values of human dignity, including shared leadership and the efficacy of group processes in a shared learning process.

5. A school-business partnership. STS/QWL deals with a system of interdependencies, in which business and education share human resources, plant, equipment, and financial resources. The operational definition is yet to be clarified. STS/QWL also addresses the issues of under-employment and underutilization that waste human resources and create dissatisfied workers (Ferguson, 1980; Trist, 1981).

6. Unity. STS/QWL in urban public school education can answer the need to create an environment where minorities can be inspired to enter the teaching profession and to become self-perpetuating role models (CFEE, 1986). These teachers will then encourage minority children to become not merely workers, but full participants in developing American economic policy, and thus, they will attempt to arrest the growth of the already huge underclass and number of working poor in America.

Institutions of higher education must relate to the same sets of questions as their business counterparts. Implications are teacher training, particularly to expand the base of minority teachers, and the long-range planning required to meeting the training needs of the

workforce in a knowledge-based, cyclical economy requiring constant retraining, teacher training.

Principles and Elements Characterizing STS/QWL Improvements for Urban Secondary Schools

From the literature reviewed, the following is offered as an attempt to identify those characteristics of STS/QWL that may improve the quality of working life in urban secondary schools. Implicit here is a suggested improvement in the excellence and quality of education.

Principles

The Work System. The work system becomes a set of purposeful activities together comprising a functioning whole. This principle foreshadows and encapsulates the design principle of minimum critical specification.

Minimum Critical Specification. Minimum critical specification is a design principle which is expanding in practice. This principle allows for basic information to be provided to participating stakeholders in self-regulating group involvement at all levels. By this principle, managers and supervisors assume new roles: guiding resources and boundary matters as teachers and learners in respecting the new work form, values, philosophy, and space and budget constraints. Consistent with boundary constructions, members of each group make decisions on matters that concern them in their work roles. Each participating stakeholder and self-regulating group becomes a self-developing learning system experiencing growth and satisfaction.

The Self-Regulating/Autonomous Work Group. The self-regulating/autonomous work group is the basic organizational building block. Self-regulation or autonomy offers the group expanded problem-solving capabilities requiring diminishing degrees of external control resulting in a flatter organizational model; allows the individual and the group to exercise latitude of choice or action in the work role; increases the efficacy of the group through increased learning and decision-making, which contribute toward increased performance, satisfaction, morale, and human well-being.

Redundancy of Function. Redundancy of function is an organizational design principle for adaptive systems upon which STS/QWL is based. It is a value system that recognizes the person as multi-faceted, capable of assuming complex roles. Consequently, each person has the capacity to perform numerous functions; to become actively involved in workplace affairs; and, as a learning system, assume broad-based responsibilities. What follows is that the person and the organization become adaptive, have flexibility, generate and benefit from variety, and create the climate and conditions for self-organization. The effect is the capacity of human systems to respond to fluid changes, complexity, and environmental turbulence for survival. The self-regulating, autonomous group is the basic organizational building block here.

The Socio-Technical System Concept. The socio-technical system concept recognizes that the workplace must be understood as adaptive (open) systems which deal with the workplace and its environment, and as socio-technical systems which deal with the persons and the workplace. The social system generates and manages employee activities. The technical

system is characterized by its prerequisites of the social system. The social and the technical systems are interdependent, or coproducers, of each other. Each relies on the other for effectiveness. They are complementary. The work system must find the highest complementary fit between the social system and the technical systems, thus creating a functioning wholistic work system by jointly optimizing the two systems.

Joint Optimization. Joint optimization, included in the principle of the redundancy of function, addresses the joint optimization of the social and the technical systems. The social system is characterized by recognition of human beings as scarce human resources, possessing many talents and capabilities worthy of development for their own purposes; and that they have social and psychological (intrinsic) needs of their work beyond the usual contractual or conditions of work (extrinsic) [see Appendix F]. The social system must complement the needs and characteristics of the technology (workplace). The technical systems must complement the human needs and characteristics of the social system for effectiveness. Each socio-technical system must work out its own design of joint optimization. Optimizing in favor of either dimension results in inefficiency and ineffectiveness of the total system as an organization.

These principles lead to a set of characteristics of joint optimization that are prerequisites for the transformation of traditional technocratic bureaucracies into renewable, adaptable, and flexible teaching and learning systems concurrently improving the quality of working life. Implicit in these principles are the principles of work design in Appendix G as adaptable to the school situation.

Elements Characterizing STS/QWL

The elements characterizing STS/QWL are the following:

1. Sharing of power is basic to joint optimization.

2. The human being is complementary to the machine and is valued and respected because of his or her special capabilities and grateful and evaluative opinions.

3. As a purposeful system, a human being is considered a scarce human resource to be developed for his or her own good rather than to be cast aside or degraded.

4. The organizational philosophy develops optimum task groupings and concurrent development of multiple skills from which adaptive flexibility is acquired in a role system.

5. Workers in role systems assume a greater response capability and flexibility, and also have a greater degree of internal control and self-regulation from group presence, based on the cybernetic theory (Weiner, 1950) of self-regulation and self-improvement. The group becomes a learning system. The flexibility of group resources enables greater degrees of environmental variance.

6. Self-regulation requires fewer management layers. The new organization becomes flatter, horizontal and vertical communications become fluid. The newer participative management style that emerges does so with all levels of the organization represented. The stakeholders design the system. The parallel organization, considered an American innovation, is one representative vehicle. Consensus is a must. Minimum critical specification is basic to organization design.

7. The emerging paradigm encourages collaboration between groups and collegiality within groups as a necessity. This is characterized by continuous discussions and negotiating items with any number of mutually agreed-upon trade-offs concluded. Hermeneutic and reflective critical discourse is appropriate.

8. The emerging paradigm emphasizes its standard of aligning the purposes of the broader society and the purposes of its inhabitants. In this way, the organization assumes an environmental and humanistic role.

9. Commitment results of the new work environment lead to favorable conditions allowing a place for commitment to flourish and alienation to decrease.

10. Innovation and risk-taking result in a positive climate, implying a positive attitude of trust, respect, and openness in relations.

These characteristics are mandatory if the traditional imperative is to be transformed into a continuous, adaptive learning system. Reform would be instant, executed by the human beings who know: those who work with the problems.

Position Summary

The arguments in this section represent a synthesis of the researcher's experience of over thirty years in parallel careers as a teacher and administrator in urban secondary schools and as a self-employed public accountant and business consultant. The most significant

experience of these was the assignment as Security Designee at South Boston High School during the turbulent early years of desegregation (1974-1977). Evidenced in this turbulent situation was the leadership that emerged from the dedicated core of teachers who continuously helped save the day--only to be cast aside later.

The first level of leadership examination set up earlier in this study identified the various actors involved in the conflict for power and control of the schools and the various deficits contributed by all parties. The researcher's negative bias is indicated in the review.

Leadership at the top of the pyramid has begun to echo business pronouncements of "bottom-up" management--a demeaning term in itself--but the educated "bottom" has been seasoned enough to analyze this as sham. Bluestone (in Wirth, 1983, p. xiii) pointed out that the objective of administrators is public relations, and they care little for participatory decision-making. The reformers advocate reform without telling us how, and the politicians are in league with whoever suits them at the top of the pyramid.

Teachers and teacher organizations are not being indicted here. The apparent soft position on teachers is derived from the consideration that they are employees in the educational structure. According to Sizer (1984), they are often treated like hired hands and "not surprisingly, they often act like hired hands" (p. 184). Herrick (1985a) adds, "most schools treat . . . teachers as children" (p. 55). The teaching organizations often reflect the thinking of these "hired children." The commonsense assumption is that employees are microcosms of their environment, which includes their leadership.

Although the need for strong and visionary leadership is expressed, no definitions of leadership and participation are universal. An operational definition is attempted here: A leader is that person whom other people will follow as a result of position, inspiration, need, greed, or recognition and satisfaction of some internal incentive. Participatory decision-making in this context is a condescending, gratuitous management exercise intended as a pacifier to convey a sense of power, significance, importance, and influence--when none of these actually exists.

The need, then, is for change. Organizations must cast off those bureaucratic practices that immobilize them. A multitude of variables and categories, almost always related to the principal, point to the desire for increased participation. As Kanter (1984) reminds us, we cannot operate for the future with antiquated rules. All parties must agree with the pentecostal idea that children are our most important natural and economic resource and that education is our survival. In the context of our turbulent environment, leadership and participatory decision-making comprise a unified construct for survival.

In lieu of an expansive discussion, consider the following: The term participatory-leadership is hyphenated to indicate the joint optimization of the participants in the leadership process. One person is needed to coordinate the activities of the school organization and provide inspiration for others to lead in turn. The argument is simple: Human beings should interact with legitimacy, trust, and respect. The essence of sharing is coequal status. The result, according to Joseph A. Raffaele, Professor of Economics at Drexel Institute of Technology, is that we are moving toward a "working society of technical co-equals" in

which the "line of demarcation between the leader and the led has become fuzzy" (Toffler, 1970, p. 141).

With this premise, the argument follows that leadership is a quality present in all persons. If two persons are involved in a given situation under a given set of circumstances, action will be initiated by one or by neither. In either case, the decision to lead or not to lead is an exercise of leadership. In the context of teacher and "leader," is the teacher a leader only in class? Is the administrator the leader because of position or inspiration? Does the teacher or the administrator want to lead? Who is the real leader anywhere? Is the real leader present?

Leadership and Magical Thinking (Lawrie, 1970) is relevant here in describing that the actors at the top of the pyramid aspire that, as if by magic, leadership and participation will converge, and the leaders will dominate. The argument on the convergence of leadership and participation relate to STS/QWL.

The humanistic value system was selected for inclusion in the literature because of its social orientation, exemplified by Walker (N. Walker, interview, January, 1987). The researcher accepts the basic humanistic values of the behavioral sciences, which precede the American development in STS/QWL, as a trend toward the STS/QWL paradigm. The humanistic system, operating under bureaucratic scientific methods, did not give formal recognition to self-regulating autonomous groups, but relied on human relations theories of findings isolated as specific events. However, sharing power is vital to operationalizing the humanistic system. STS/QWL developed its principles through action-research, affiliating findings as bases for further research as a system of interdependencies.

The San Jose Teacher Improvement Project (TIP) examined in the literature attempted most of the STS/QWL elements of participation. The positive results of the TIP reversed themselves when the funding terminated, a problem that would also affect the humanistic value system. The Jamaican Five-Year Education Plan illustrates that the STS/QWL paradigm is rooted in socialistic-democratic countries.

School-based management (SBM) incorporates many of the elements of participation of the STS/QWL paradigm and has been adopted in at least three states (Marburger, 1985). Some deficiencies of SBM are: (1) its use of appointed committees rather than committees elected by relevant constituencies with recall provisions; (2) again, its use of appointed committees that may, unless otherwise directed, preclude departmental and classroom level involvement; and (3) the absence of teacher organizations. Herrick (1985) adds the absence of the parallel structure and suggests that the introduction of parallel organizations can correct these deficits. Personal experience indicates that SBM endorses the philosophy of participation with three caveats: (a) central- and district-level politics are counterproductive; (b) dissolution inhibits future incentives; and (c) SBM can become a condescending, gratuitous management exercise.

The brief literature review on effective schools included in this paper shows that all is not well with the effective schools model (Cuban, 1983; Mackenzie, 1983; Miles, Farrar, and Neufeld, 1983; Ralph and Fennessey, 1983). F. Pratzner (personal communication, December 14, 1986) modified his original perception of STS/QWL adaptability to the model. The effective schools model as described in the literature appears to

incorporate STS/QWL principles, but does not, in reality, integrate the essentials of the STS/QWL paradigm. This is evidence of researchers' piecemeal prescriptive approaches and their hesitancy to extend themselves on an unknown quantity, particularly in a field dominated by non-Americans. As Goodlad (1983) and Wirth (1983) have pointed out, if all the claims of success were real, we should be experiencing huge gains in school effectiveness.

Some specific arguments rejecting the effective schools movement are presented, although its very name defends it against criticism. First, an effective school cannot be created by administrative fiat. Raising test scores, an overused measure, may be accomplished by an authoritarian climate. If teachers are measured by this standard of productivity, with ostensible participation, then production will not go up after initial efforts show significant percentage improvements: If there is insistence that scores be raised higher, teachers will retreat. Herrick (1981) pointed out that ". . . once workers are fully utilizing new decision-making structures, the percentage improvements in labor productivity have been realized. . . . The well . . . will continue to yield its bucket a week. But one bucket will not be 10 percent larger next week and 21 percent larger next week" (pp. 627-628). Second, effective schools imply the use of prescriptive solutions. STS/QWL does not endorse prescriptive solutions because they neither allow for rapid changes nor address tomorrow's needs (Purkey and Smith, 1985, p. 360). Third, the effective schools model lacks sufficient empirical foundation. And fourth, it has been, essentially, an elementary school model, and has been perceived as ineffective in the hierarchical school system.

Another contra-argument is borrowed from Purkey and Smith (1985):

> Staff participation in decision-making at the school level was not singled out as a characteristic of a successful school in the effective schools literature. It was identified as important in the research on implementation and change. We argue, also, that it is integral to the process of creating [emphasis original] an effective school climate. (p. 359)

The final contra-argument rests on the STS/QWL concept that involves a system change. The standing organization can be defined as a system (N. Herrick, personal communication, February 7, 1987). However, since STS/QWL is a paradigm validated by action-research and testing, its acceptance is consonant with its ability to deal with the turbulent context of today's American schools. The effective schools model remains, basically, a traditional model not capable of dealing with contextual turbulence. The rejection of the effective schools model is not based upon its ideals, but upon its ineffectiveness in the hierarchical school system. Typical of the recent reform reports and prescriptive models, the effective schools model tells us what to do, not how to do it. The nuances of the prescriptions of, among others, "strong leadership" and "fierce custodians of their curriculum" foreshadow a thinly veiled endorsement of a continuation of the reductionist model in the form of the instructional leader as a benevolent dictator, if not worse.

Of the models examined, the alternative model appears to offer educational solutions for the exigencies of the times. However, the alternative models have shortfalls: (a) the departure of the energy-driven ladder (O'Malley, 1979); (b) the inclusion of alternative programs in traditional structures, where member autonomy is often denied and

budget problems or changes in the consumer communities make its acceptance mercurial. The full impact of the alternative model can only be realized with the STS/QWL paradigm as its guidance system--in toto.

The attempt has been made to maintain a polite attitude in some of the arguments. However, the main argument is this: What we have and what we have had in education is not working and needs to be replaced. The solution offered is to improve the quality of working life for faculties in secondary schools with an STS/QWL paradigm, with the implicit argument that life for students will also be improved. Furthermore, the collective improvement of life for the collective membership will improve human dignity toward the goal--human well-being (Herrick, 1981). The essence of the matter is expressed by Wirth (1982): "Becoming Persons Again."

CHAPTER 3

METHODOLOGY AND PROCEDURES

Introduction

This chapter describes the case study procedures and critical analyses applied in the study by the researcher in his role as a site-based participant-observer in order to (a) gain a perspective of Central High School and to determine those Socio-Technical Systems/Quality of Working Life (STS/QWL) elements that might characterize an improvement in the quality of working life for the urban secondary school environment, and (b) provide a field-based experience for urban secondary school stakeholders and future researchers. (The change attempt is reviewed in Chapter 4.) The paucity of STS/QWL experiences in education and the need for research in this field have been cited by Pratzner and Russell (1984), Wirth (1983), and others.

Data collected from September, 1982, through June, 1983, and in the fall and winter of 1987-1988 is analyzed according to the following evaluations and procedures:

1. Application of a commonsense approach to evaluation and critical analysis of visible evidence of what works, what does not work, and, equally important, the reasons for each.

2. Application of STS/QWL characteristics derived from the literatures reviewed.

3. Interviews to be conducted as a follow-up with selected stakeholders directly involved with the researcher and with persons ancillary

to the standing organization, who are not considered to be stakeholders.

4. Participant observation during the entire study in numerous meetings and conferences with stakeholders both singly and in groups.

5. Participant observation during the study period as administrator, facilitator, and consultant to the headmaster and stakeholders.

6. Content analysis, archival research and analysis of relevant organizational documentation, which contain some hard data.

7. Document analysis specific to the organization, including operational and informational documents related to daily school functioning, such as bulletins, memoranda, reports, and correspondence.

8. Sources are constituted as primary and secondary based on their relevance to the organization and the STS/QWL concept.

Case Study Rationale

The case study model of inquiry, often referred to as "qualitative" or "ethnographic," is also known as naturalistic inquiry, or field research. Because researchers have become dissatisfied with traditional forms of educational inquiry, the ethnographic method, first applied by researchers trained in anthropological methods, has become increasingly popular (Farley, McKenney, Kohan, Smith, and Pratzner, 1985, p. 50; Gay, 1987, p. 207). In this evaluation, the terms case study, qualifiable, and ethnographic are interchangeable.

Reasons given for dissatisfaction with quantitative and empirical method are (1) that they lead "to a fragmentation of any integrated and

coherent structure of meaning" (Farley et al., 1985, p. 37); (2) that they tend toward oversophisticated technological frameworks requiring anecdotal interpretation (Gilsinan and Volpe, 1984, p. 181); and (3) that they rely on a concept of the "expert's" monopoly on objectivity (Bowers, 1982, p. 531).

The reward of the case study evaluation is the researcher's knowledge that "generalizations available in the field and . . . the discussion of human characteristics removed from their functioning in the human individual" ignore the interdependencies of the human and environmental factors as organic functions in a change process (Fox, 1969, p. 428).

The ethnographic approach used here was complemented by the researcher's investigative field experiences in the public and private sectors during the year of the study. Critical analysis addresses STS/QWL values and process and attempts to construct hermeneutical validity for this case study. The case study approach satisfies the stakeholders (Farley et al., 1985, p. 70). In addition, the case study approach "provides different perspectives of reality" (Guba and Lincoln, 1981, p. 57). However, Asher (1976) advises that the observer be cautious of "personal biases and judgments" and of generalizing from "just a few subjects" (p. 149).

Subjects

The subject base for this study is comprised of (a) an urban secondary school faculty in the Boston Public School System undergoing a

change in an attempt to transform a traditional, hierarchical paradigm to an optimum high participative-management paradigm, and (b) the stakeholders in the change process, who are the individuals involved in the standing organization. The stakeholders are:

1. The teaching and nonteaching staff. The teaching staff includes teachers and the Assistant Headmasters-Subject Area (department heads), all represented by the teachers' union and the in-house faculty senate. Nonteaching professional staff include the guidance counselors, nurses, and the administrative assistant. Housemasters and programming persons did not teach classes because of the exigencies of service. They are represented by the teachers' union also.

2. The building administrators.

3. The support staff, including the secretaries, dieticians, housekeepers, and uniformed security force. The uniformed security force was under the dual jurisdiction of the Director of Safety and the headmaster (principal) in practice.

4. The parents and students. The students are not considered subjects in this study.

5. The business partnership, the university collaborative, and all other external collaboratives and resource agencies. The latter two stakeholders are not considered subjects.

6. The policy and governance structure of the school system. These are not included as subjects.

The demographic picture of stakeholders participating in the study is graphed as follows: Stakeholders by Race are shown in Figure 3.1; Stakeholder Maturity, in Figure 3.2; Stakeholders' Gender, Figure 3.3;

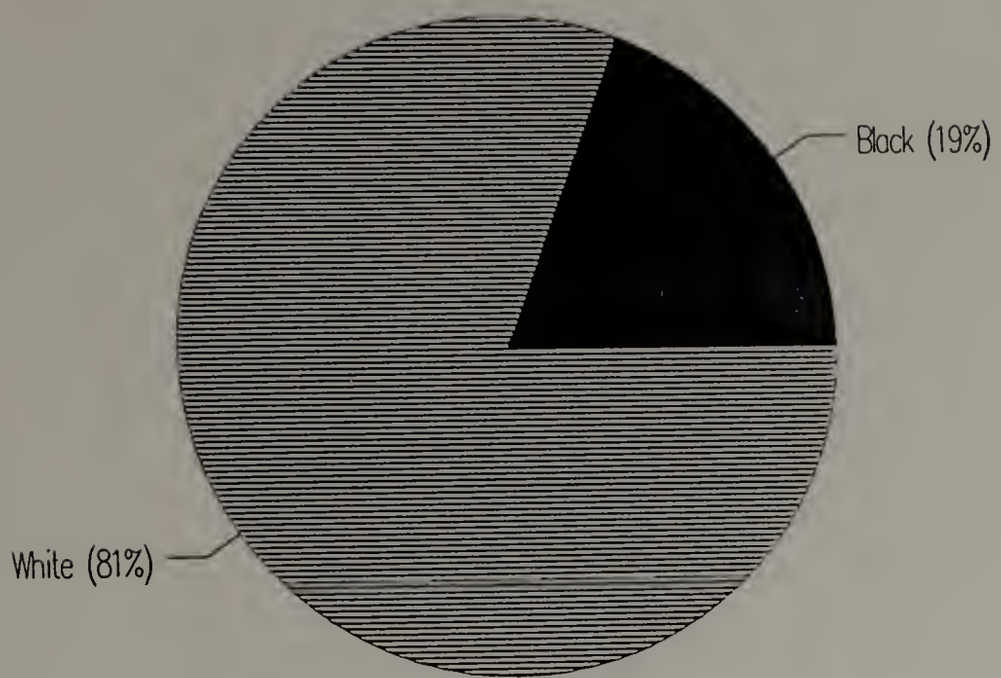


Figure 3.1. Stakeholders by race.

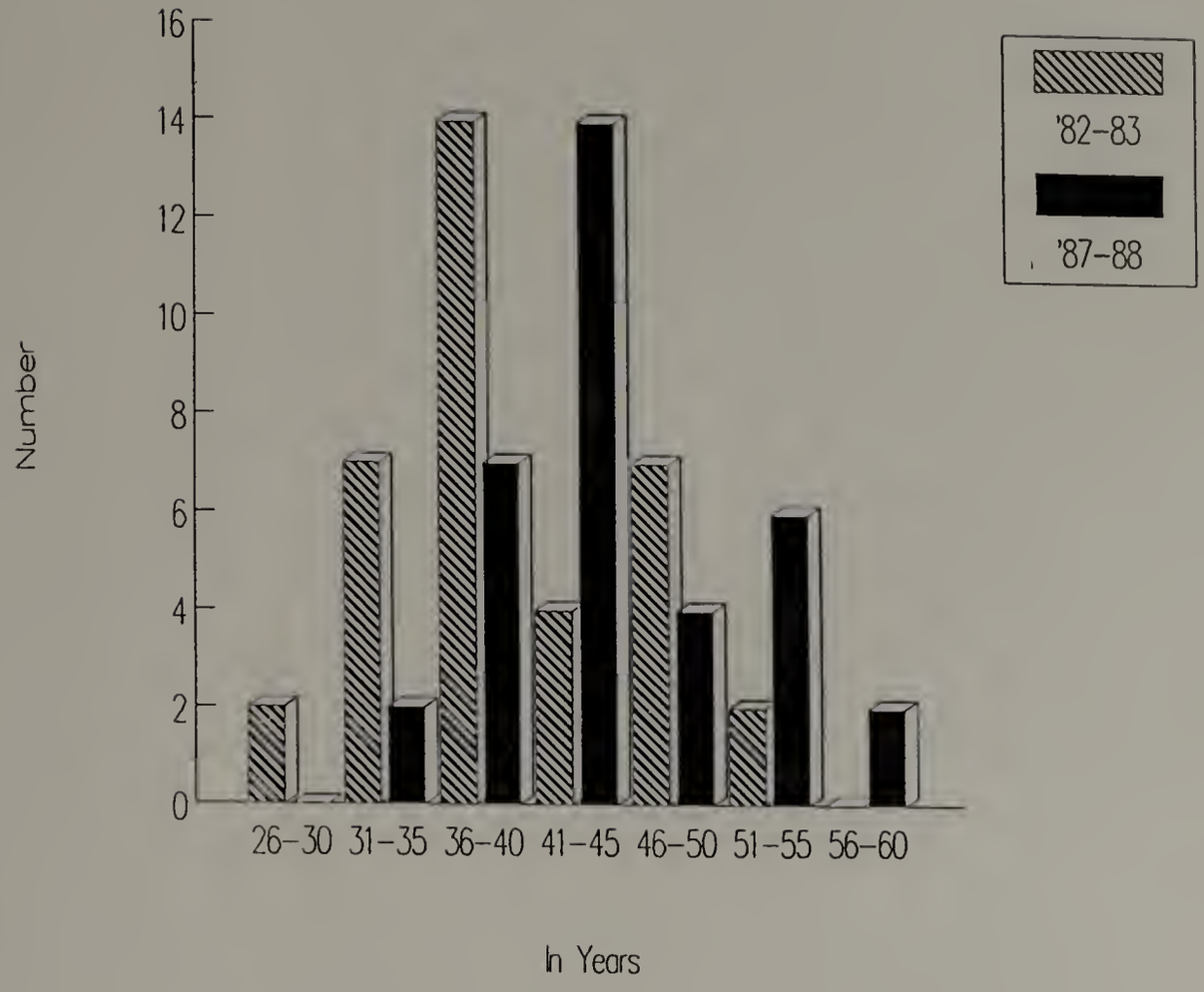


Figure 3.2. Stakeholder maturity.

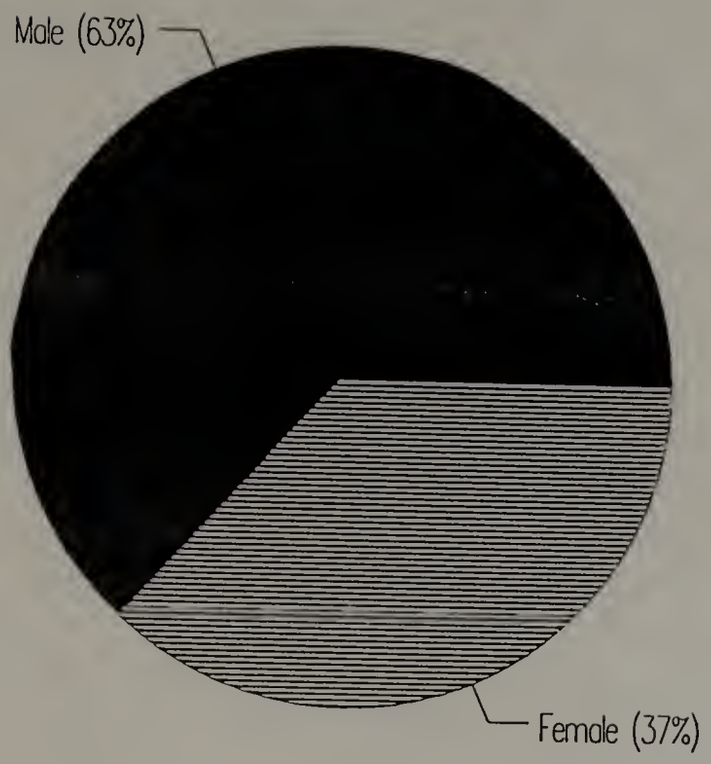


Figure 3.3. Stakeholders' gender.

Stakeholders' Education Level, Figure 3.4; Stakeholder Experience, Figure 3.5; Stakeholders' Political Inclination, Figure 3.6; and Stakeholder Level, Figure 3.7.

The researcher's involvement in the change efforts and admission into the Boston Secondary Schools Project (BSSP) is one of the catalysts for this study.

Design

The design structure guiding this study consists of a five-element framework:

1. The socio-technical systems (STS) concepts and characteristics, hermeneutics, and critical analysis will be the principal guidance system for evaluating the change process.

2. Interviews during the fall and winter of 1987-1988, considered as follow-up and self-reflective because of the time lapse, will attempt to encourage the stakeholders to reflectively correlate their current responses, attitudes, and reasons with those they gave during the year of the study (1982-1983).

3. The researcher's year of study and part of the reflective evaluation base is formulated by his status as participant-observer and his various roles; his field notes, correspondence, and school operational memoranda; and face-to-face formal and informal interviews.

4. Archival records formulate a base of hard data for comparative statistics as applicable indicators of successes, deficits, or acknowledgment of the uncontrollable nature of the situation under study.

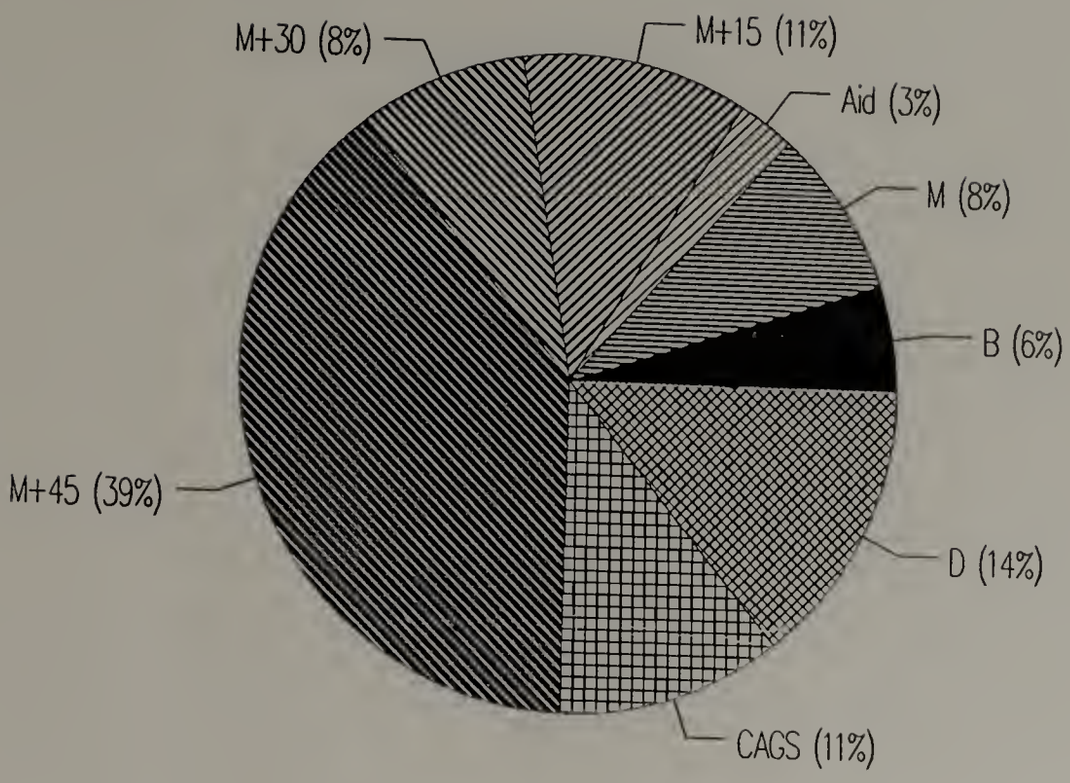


Figure 3.4. Stakeholders' education level.

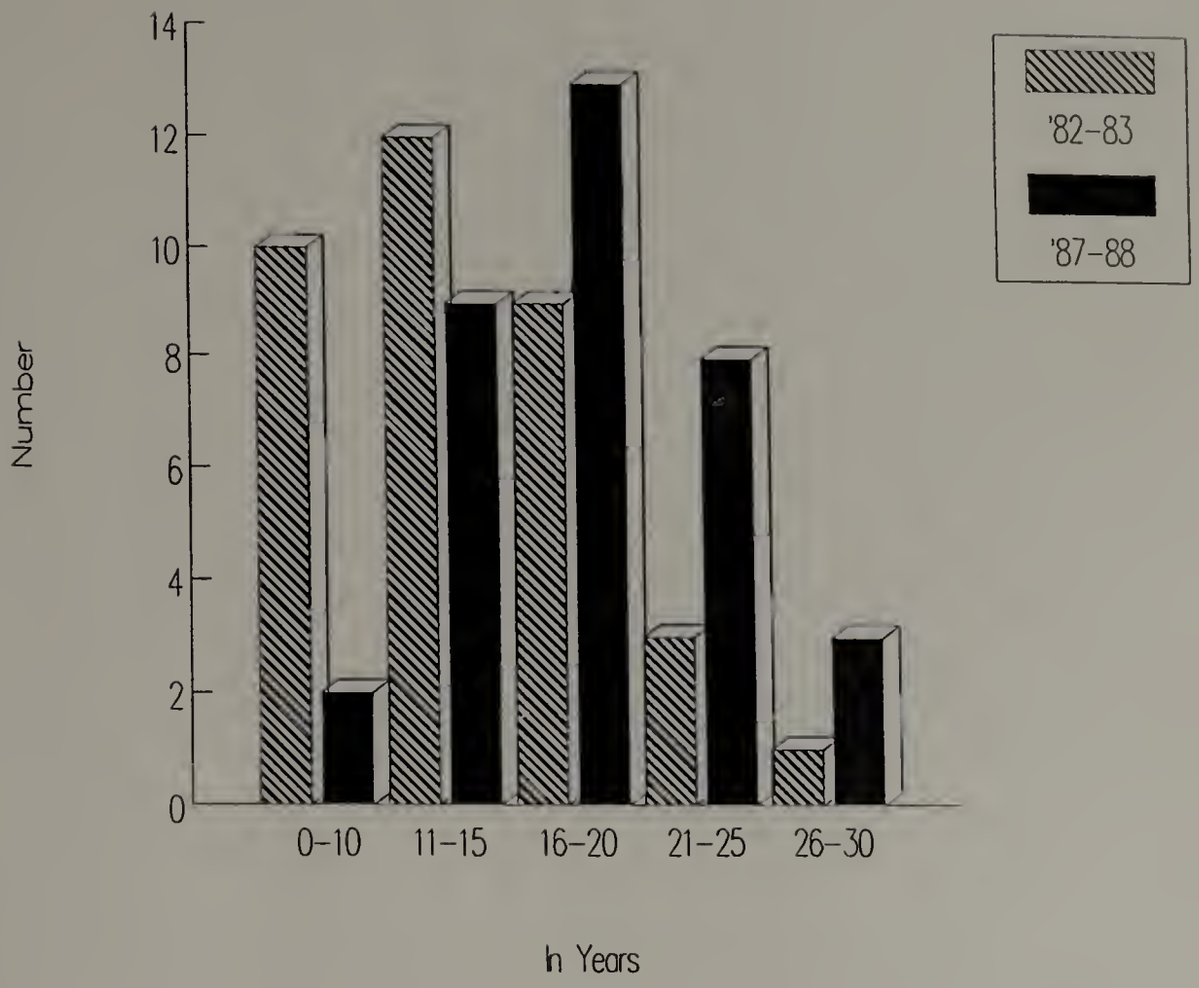


Figure 3.5. Stakeholder experience.

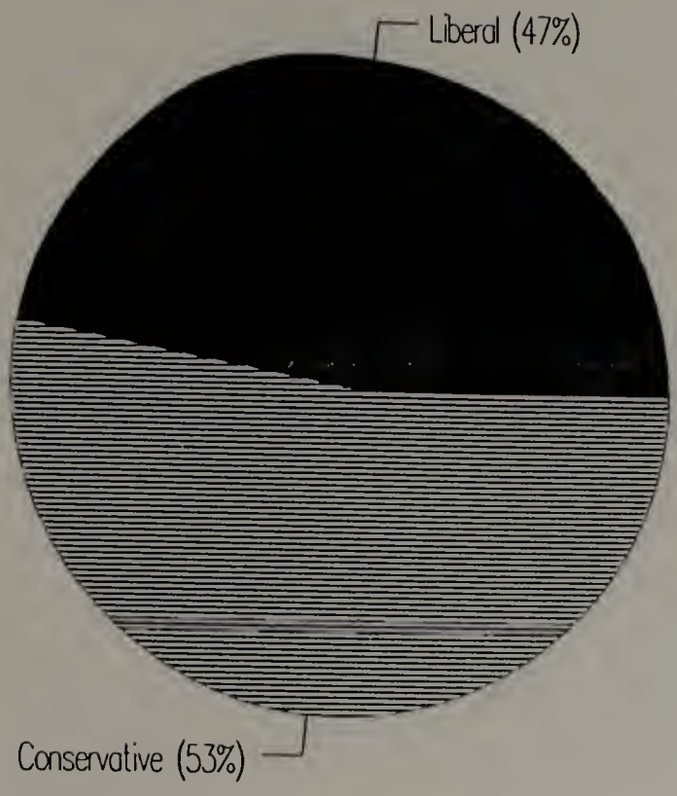


Figure 3.6. Stakeholders' political inclination.

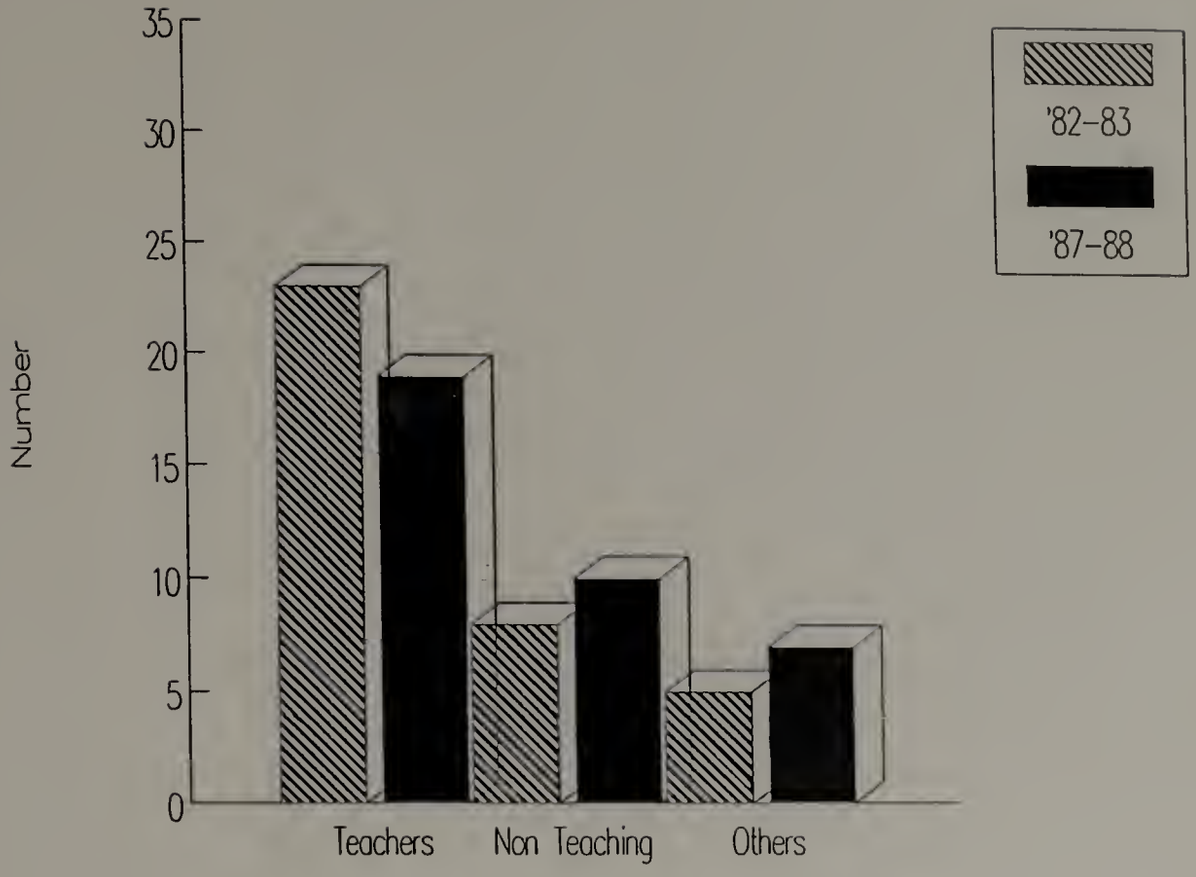


Figure 3.7. Stakeholder level.

5. A final evaluation base will be formed by primary sources, such as STS researchers, practitioners, and others directly related to the study, and by interviews; and secondary sources, such as newspaper articles and communications indirectly related to the study.

Evaluation and Procedures

Evaluation of the correlation of STS/QWL concepts and characteristics with the findings of the change efforts and the follow-up interviews are guided by ethnographic and critical analysis from a hermeneutic perspective (Habermas, 1979). The hermeneutic perspective relates to the ethnographic evaluation which, in this study, deals with the interacting human activities, the practices, and the institutions that characterize the school and the various stakeholders in the sociocultural sense. This metaphor is perceived in the biological organism and applied to the social realm. In discussing the similarities between critical evaluation and hermeneutic policy analysis, Dryzek (1982, p. 222) defines the latter "as the evaluation of existing conditions and the exploration of alternatives to them, in terms of criteria derived from an understanding of possible better conditions, through an interchange between the frames of reference of analysts and actors." Correlation is made with STS/QWL literature and categorized into three broad categories: those change processes and STS/QWL design features that worked, those that did not, and the reasons underlying each success or deficit.

The conclusions supported by the findings present those STS/QWL characteristics that offer to improve the QWL in urban secondary school

environments.

Although the positivist reader who prefers empirical evaluation may not be satisfied with the methodology, the STS/QWL concept and characteristics lend themselves to hermeneutic critical analysis in a qualitative sense for the purpose of this study.

The accelerating chorus in favor of school restructuring evidences the need for practitioners to learn more about viable altrnatives. To acknowledge the positive experiences of the STS/QWL paradigm in the private sector is equally important.

Socio-Technical Systems/Quality of Working Life (STS/QWL): Concept and Characteristics

Concept

Measuring for evaluation traditionally follows the quantifiable scientific methodology based on situations and variables. QWL examination follows a different methodology of evaluation. According to Emery (1983), "the needs for sophisticated evaluation of QWL have been seriously overestimated" (p. 37). Mansell and Rankin (1983) pointed out that evaluation is necessary for people involved to understand the process, and that it should point out what is working and what is not working; to expect that all will work according to plan is unrealistic. QWL values, principles, and processes do not conform to traditional job organization design and, thus, "much of what is important in QWL is not quantifiable. . . . Information must also be collected on subjective experiences and impressions. . . . In some cases, it is also useful to collect data on actual behaviors and feelings in specific incidents of

critical importance" (Mansell and Rankin, 1983, p. 47).

Emery (1983) argued that it is not necessary to have QWL worksites flooded with research teams attempting to measure the extent of change. According to Goodman (1979), who analyzed the Rushton experiment, the proper questions should focus ". . . not on what happened, but on why events happened the way they did; not what did not change, but why it did not change" (pp. 10-11).

Farley et al. (1985) provided a practical explanation for applying the critical analysis process. Contextually, generating evaluation knowledge for the critical analysis process or reflective critical discourse occurs when communication validity breaks down. Communication has validity when (a) it is comprehensible and intelligible, (b) the communicated proposal is true, (c) the communication is authentic and sincere, and (d) the speaker and the audience are present in a legitimate relationship (pp. 109-114).

Farley et al. (1985) contextualized a three-stage model for generating evaluative knowledge. The stages are operationalized as constituent "moments" during which reflective and critical discourse takes place. The Context for Generating Evaluative Knowledge is shown in Figure 3.8, which is consistent with their design of critical evaluation in vocational education to apply to general education. The model reflects the researcher's auditing, investigative, and conflict resolution background. The questions are basic and reflect a beginning. The objective is to keep everyone talking until a solution is satisfactory to all.

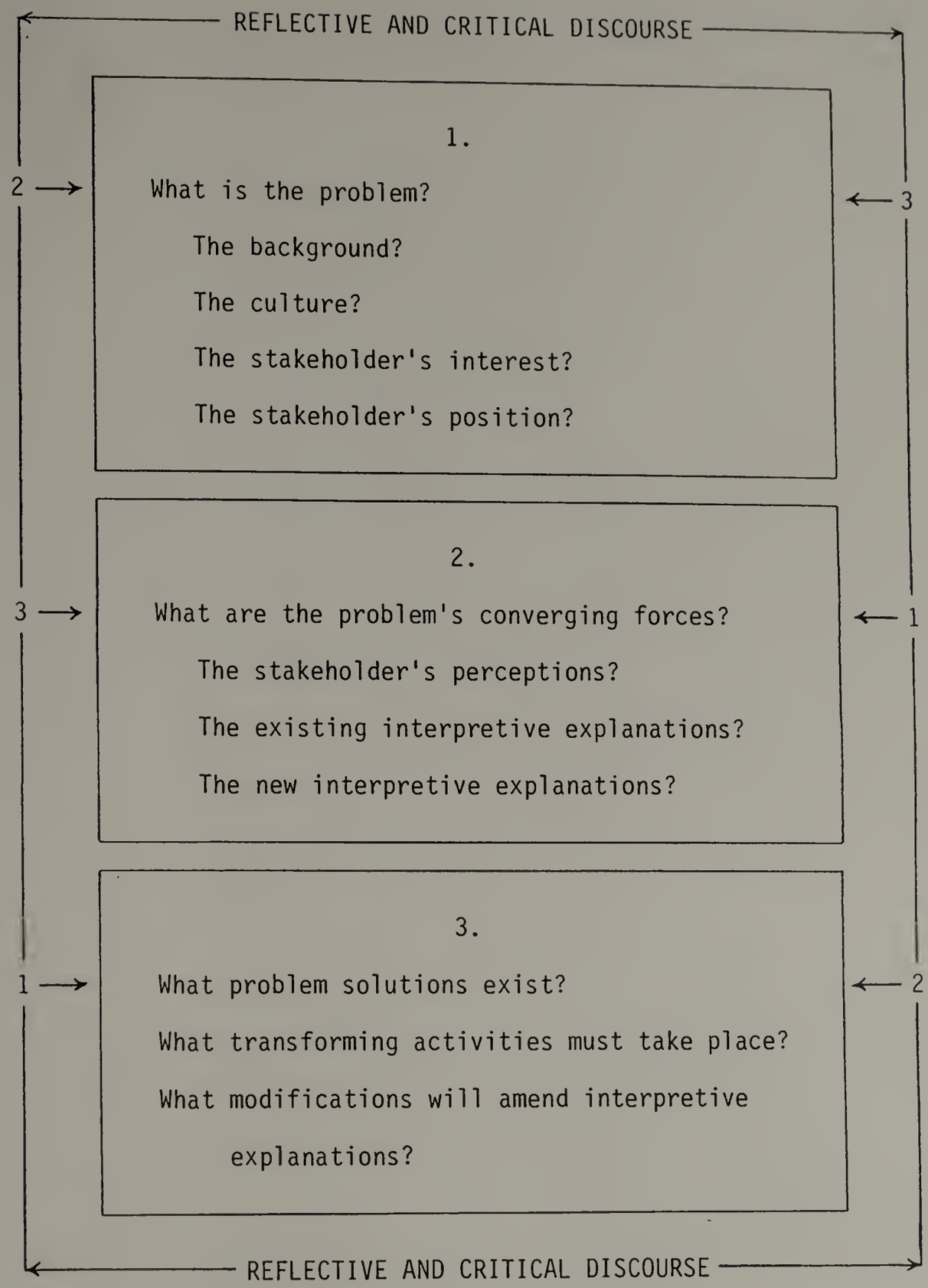


Figure 3.8. Context for generating evaluative knowledge.

Characteristics

In order to evaluate the study results and draw conclusions, the STS/QWL characteristics and relevant literatures applied to the change experience will be compared with the findings of the change experience.

The Interviews

Formal interviews conducted in the fall and winter of 1987-1988 are compared with the informal interviews conducted during the study year (1982 to 1983). Interview questions (see Appendix J) effectively remained the same.

The interviews, like those conducted during the study year, are open-ended to allow for spontaneous feedback from interviewees, which, in turn, are the basis of developing additional study focus questions. This method provided significant learning experiences and insights. Questions were added for the purposes of this study and of the researcher's sense of inquiry as the occasion arose.

Points of Reference

The researcher and many of the stakeholder interviewees are no longer assigned to Central High School. The researcher is presently assigned to another Boston urban secondary school; some individuals have retired and moved. However, the researcher has maintained personal contacts with many of the stakeholders. In anticipation of memory lapses, interview questions were either prefaced or, subsequent to presentation, clued, if necessary. Field notes of the study year interviews or activities and the researcher's reflective recollections provide the preface

or clue base.

Interviewer Qualifications

The researcher, as interviewer, has specific interview training and experience that includes membership on evaluation teams for the New England Association of Schools and Colleges and for the Massachusetts Association of State Directors of Teacher Education and Certification, for the accreditation of New England secondary schools and colleges, respectively. Interviews on these teams provided experience in generating responses and attitudes and eliciting evaluative criteria from staff members of their schools. Additional training and experience was gained as an administrator and security designee in the landmark Boston secondary school, South Boston High School, during the earlier desegregation period beginning in 1974. Interviews, the majority of which were delicate, involved pupils, parents, teachers, administrators, law enforcement personnel, and numerous other groups. Further training and experience has been gained as Assistant Headmaster-Subject Area and as Coordinator-Director of Career and Occupational Education at South Boston High School; and as an Assistant Headmaster-Subject Area and Assistant Headmaster-Administration at the Central High School. Private sector training and experience includes interviewing as an employer, consultant, investigator, and businessperson.

Interview Questions

The interview questions (see Appendix J) were developed with the assistance of Dr. Kenneth A. Parker, the chairperson of this study, and Dr. Mohammed Zaimaran, Research Assistant to the Boston Secondary Schools

Project (BSSP). Interview questions were critiqued by Dr. Philip Stec, BSSP on-site director at Central High School from 1982 to 1983; Dr. Russell Goyette, BSSP graduate; and Dr. John Caputo, BSSP graduate. Question design attempted to relate to the assumptions in Chapter 1 and was deemed appropriate to STS/QWL characteristics in the literature reviewed (Chapter 2). Questions 2 through 10 are also designed for specificity to elected areas of interest. Question 11 allows for stakeholder input into the interviews. The assumptions addressed are consistent with the elements characterizing the STS/QWL paradigm such as:

1. The principle of joint optimization.

2. The coequal status of the human being and the workplace, with the human being valued as a multi-faceted individual capable of exercising appreciative and evaluative judgments characterized by the redundancy of functions.

3. Recognition of human beings as adaptive and purposeful learning systems and as scarce resources to be developed for their own sake.

4. Optimum task grouping, generating the incentive for the stakeholder to utilize multiple broad skills.

5. Encouraging the stakeholder's exercise of greater control and self-regulation within his or her area of responsibility.

6. Development of a flatter organizational model characterized by open-system participative styles, including horizontal and vertical communication.

7. A consensual, negotiated order between and within groups--collaboration and cooperation.

8. Alignment of the organization's purposes with those of the wider society and the stakeholders, thus humanizing and environmentalizing the organization's purposes.

9. Increased commitment as a result of reduced conflict.

10. An innovative climate characterized by high trust levels and respect.

The study chose areas of specificity to address:

1. Conversion of conflict to collaboration and cooperation.

2. Leadership in the continuing evaluation of the educational systems--the actors and evaluation of them.

3. Leadership in the narrower sense of the school under study.

4. Stakeholder's perception of colleagues and self.

5. Stakeholder's perception of participation compared with the researcher's definition.

6. Stakeholder's perception of underemployment and underutilization.

7. Stakeholder's ideological perceptions related to democracy and to acceptance of workplace leadership and authority in the light of his or her educational and experiential level and values.

8. Stakeholder's perception of autonomous teacher teams offering improvement in QWL, effectiveness of performance, and quality education.

9. Stakeholder's perception of specific work conditions or needs, exclusive of curriculum and program, for resulting job satisfaction--QWL.

10. Solicitation of question(s) appropriate for inclusion in the study.

An eleven-question schedule is presented. The schedule was flexible to allow for a conversational and cordial tenor between the interviewer and interviewee. Three additional questions were generated by three interviewees as they were invited to do by Question 11. These questions were asked of the number of interviewees remaining to be interviewed. A six-question contingency schedule was available and used as warranted by the interview process.

In an attempt to eliminate ambiguities and to allow the researcher to acquire a sense of validity for the interview questions, exploratory pilot interviews were conducted. Two stakeholders who were not included in the interview participant schedule and two neutral persons were utilized as exploratory interview subjects. The interviews were open-ended and in-depth to allow for correctional activity. The pilot interviews maintained the same confidentiality status accorded the study interviews.

Interviewee Selection

Selection of interviewees was made according to the following criteria: A base number equaling 50 percent (65) of the total number of stakeholders (130) were invited to participate, a percentage indicated by consultation with practitioners and numerous neutral advisors. The study elected that the subjects will be comprised of selected stakeholders who were actively involved in the STS/QWL experience and representative of the various stakeholder levels and sublevels. The predetermined acceptable percentage range for response must fall between 20 and 25 percent of the total number of stakeholders invited to participate.

Letters were sent to the 65 selected stakeholders with an explanation of the researcher's status and of the purpose of the study, an invitation to participate in the study, a request for a response, and a request for the respondent's signature on a permission form that explains the interview method and options, privacy rights, and related information. (See Appendix J for copies of the correspondence.) Of the 65 letters sent, 5 (7 percent) were returned as undeliverable; 20 (31 percent) were nonproductive; and 40 (62 percent) were returned accepting the invitation to participate. Of the 40 who accepted, 32 (80 percent) were interviewed for the study; 4 (10 percent) were interviewed for correctional activities; and 4 (10 percent) were received after the time period for the interviews expired.

Interview Method and Recording

Interview options were face-to-face or telephone interviews, recorded either on tape supplemented by field notes or by field notes only. Telephone interviews were recorded on tape and supplemented with field notes to record attitudinal and interactional perceptions with the interviewee. Preference for the interview telephoned to the interviewee's home was indicated in the interview invitation. The reason for this approach was to reduce inconvenience for the interviewee as well as to elicit in-depth responses. In contrast to the average interview time of 45 minutes cited in the invitation, the shortest interview was completed in one hour, and the longest, two and one-half hours. A preinterview personal data questionnaire (see Appendix J) was administered for use in a computerized data analysis. Interviewee names were deleted

from all transcribed materials, and all tape recordings were magnetically voided in order to protect the interviewee's confidentiality. Interviewees are identified by a code name or number in the transcripts.

The open-ended, in-depth interview was selected as an additional primary source of research data to elicit the information needed to determine the perceptual outcome of the STS/QWL experience. This experience is evaluated in issues of the STS/QWL and relevant literature characterizing improvement offerings and the actual experience outcomes. These issues relate to basic questions of values and assumptions in working out a new organizational philosophy, as well as to process, design, and other complex interdependencies. The interviews are analyzed for categorical responses and provide input for a computerized data analysis by an IBM PC.

Content Analysis, Archival Research, and Analysis

Sources of data include operational school bulletins and school system publications relevant to the management of Central High School. Many of the facts contained in these documents were not subject to participant observation and lacked physical trace. As a result, a singular observational approach presents an inherent limitation in that the data cannot be utilized in response to questions asking why, only to questions asking who, what, when, and where (Smith, 1975, p. 217).

Participant Observation

Complementing the archival records research, the researcher assumed the eclectic approach of participant-observer. During the year of the study, the researcher participated in and conducted interviews during numerous ongoing activities, attempted to maintain a compatible relationship with the stakeholders, and collected voluminous field notes. These enhance the findings of the current interviews. According to McCall and Simmons (1969), the role of participant-observer:

> . . . refers to a characteristic blend or combination of methods and techniques . . . involves some amount of genuinely social interaction in the field with the subjects of the study, some direct observation of relevant events, some formal and a great deal of informal interviewing, some systematic counting, some collection of documents and artifacts, and open-endedness in the direction the study takes. (p. 1)

Participant-Observer as Administrator, Facilitator, Consultant

The researcher's triangularly interdependent roles of administrator, facilitator, and consultant surfaced when he was selected, in 1982, to be one of three Assistant Headmaster-Administrators at Central High School by the newly-appointed Headmaster. Since 1978, he had held the position of Assistant Headmaster-Business in Central High School. He was invited to become a part of the BSSP by Dr. Philip Stec of the University of Massachusetts and two members of the staff of Central High School, then recent doctoral graduates, all three of whom agreed that the new management model would be a viable research subject for doctoral study. The researcher enrolled in the University of Massachusetts

Boston Secondary Schools Project (BSSP) and assumed a fourth role, that of participant-observer.

The researcher's years of experience in parallel careers included reflexive documentation of events and observations in the private sector. Documentation in the public sector had become significant in the recording of the experiences of the historical events unfolding when busing to South Boston High School began in 1974.

Concurrent with the researcher's note-taking at Central High School, visible for "all to see," was the eminent presence there of the University of Massachusetts BSSP school-based office. At the Central High School, anyone taking notes was assumed to be involved in the BSSP doctoral program. When the researcher assumed an "official" role of participant-observer, his triangular role assumed a new, quadrangular proportion. These roles are discussed in Chapter 4.

The quadrangular role offered the researcher:

1. Multidimensional interpretations. The private sector experience of wearing many hats and survival motives governed the selection of the appropriate role.

2. Serendipitous benefits. These included personal development as a continuous learner and concurrent teacher among many stakeholders; constant interaction with stakeholder constituencies; extensions to new issues; enhancing tacit knowledge of the experience; ease of interpretation of stakeholder's interests, perspectives, and values in the ongoing evaluative process; and perpetual self-appraisal and self-examination in the attempt to maintain a critical perspective on his multiple roles.

3. Potential problems or limitations. These focused more specifically on the role of participant-observer in interpreting and recording some stakeholder feedback. (These limitations are discussed in sections of Chapter 5.)

Although frequent interaction and growing intimacies with stakeholders provided superior feedback, a large number of stakeholders revealed obvious or poorly veiled emotional pain and sadness because of the school situation. Many stakeholder perceptions were focused on STS/QWL issues such as safety, security, human dignity and well-being, the students' education, and others. Much of this feedback was painful for the researcher as well, and required serious efforts at detachment.

Many approaches were utilized to maintain detachment. Again, private sector survival processes provided the operational framework. Investigative discourses with the stakeholders concerned were encouraged, as were discourses between the researcher and the headmaster. During their discussions, they alternated roles, each taking a countervailing position to the issues in order to maintain objectivity and gain perspective.

Another limitation resulted from the researcher's concurrent roles of participating and observing, which often precluded recording of nonverbal clues, nuances, and, frequently, factual data. Other limitations are that, in some instances, the researcher interpreted and recorded events and, after reflection, reinterpreted them and changed the field notes. The more significant limitation, perhaps, was the need to constantly refocus efforts at self-discipline to maintain perspective and academic integrity. In the final analysis, the recording of

information was predicated upon the hypothetical situation that a recorded interpretation would have to be defended successfully in a court of law. This rationale resulted from experience in the private sector of proactive recording for future retrospective analysis.

Document Analysis

Archival and external documents are subjected to external and internal criticism. External criticism assesses the authenticity of the data. Internal criticism evaluates the accuracy and reliability of the documents. The significance of the criticism rests with the researcher's reflective recall of several primary and secondary source allegations that school-based and school department data was often purposely manipulated, especially during the earlier days of busing.

Sources

Primary and secondary sources of information and historical documentation are utilized in the study.

Primary sources will include the following:

1. Communication with Eric Trist, original researcher, discussing STS concepts and the reconceptualization of participative management as a participative leadership concept, and the validity of multiple evaluative criteria and approaches in this study.

2. Several communications with Hans van Beinum, original researcher, discussing the constructionist or purist form and substance of the STS concept; the principle of joint optimization; the distinction between

STS and QWL concepts; his rejection and caveats regarding parallel organizations; and the multiple evaluative criteria and approaches in this study.

3. Several communications with Fred E. Emery, original researcher, discussing the proper analytical approach to the interview responses; the inappropriateness of the social scientists' traditional measurement; and the appropriateness of analysis looking for the "why" of the situation.

4. Several communications with Arthur Wirth, STS/QWL educational researcher, on the subjectivity and applicability of the STS/QWL evaluative methods to this study, and the limitations of positivist approaches.

5. Communications with Neal Q. Herrick, STS/QWL theorist, about defining a system to include a single unit, such as Central High School, of a total system for purposes of this study.

6. Communications with Dr. Frank Pratzner, Ohio State University, educational researcher, concerning the issues of underemployment and underutilization; educational implications of STS/QWL; redefinition of participative management as participative leadership; manifest STS/QWL activities; growing concern about the need to respond to educational reform with a flexible system of school management such as STS; the limitations of the effective school model in urban secondary schools; and the appropriateness of a multifaceted approach in evaluation of this study.

7. Communication with Michael Maccoby, STS/QWL consultant, and Richard Margolis, Research Fellow, Harvard Project on Technology, Washington, D.C., regarding the landmark Bolivar, Tennessee, QWL case

documentation published and evaluative criteria for their study.

8. Interviews with selected active stakeholders representative of various levels and sublevels or subsystems of the organization.

9. System-wide statistical information published by the Boston School System.

10. Daily school operational literatures, many written and kept by the researcher, filed by the school secretaries.

11. School catalogues containing a historical background of the school, also in the possession of the researcher as an alumnus.

12. The researcher's participation and observation.

13. Transcripts of Morgan vs. Hennigan, in Civil Action 72-911, 1974, in the U.S. District Court of Massachusetts.

Considerable literature of STS/QWL researchers and practitioners, generally in the private sector, was reviewed or analyzed, relating the STS/QWL concept in its constructionist form to a characterized redefinition for an urban secondary school required clarification. The clarification was sought by personal contact with many leading edge original STS/QWL researchers and practitioners. Primary concerns were participation, leadership, parallel organizations, a focus on evaluation, and STS/QWL concepts involved in total school system change rather than with attempted STS/QWL activities and other relevant issues.

Secondary sources of information and historical documentation include, but are not limited to, the following:

1. The following network of persons and institutions were contacted in an attempt to identify school systems using the STS/QWL concept: Roland Barth, Principals Academy, Harvard University;

Tom Corcoran, National Education Association, Washington, D.C.; David Florio, American Federation of Teachers, Washington, D.C.; Jane Hammond, Maryland State Education Department; Daniel Heffernan, Assistant Superintendent, Brighton School District, Rochester, NY; Paul Hershey, N.A.S.P. Assessment Lab; Spike Jorgensen, Superintendent of Schools, Tok, AK; Hans van Beinum, Director, Ontario Quality of Working Life Centre, Ontario, Canada; Professor Ross Willink, University of Rochester, NY; Work in America Institute, Scarsdale, NY.

2. The Ontario Quality of Working Life Centre, Ontario, Canada, through Ester Meisel, sent a library of QWL literatures. These several mailings were sent free of cost, for which gratitude is expressed.

3. Dr. Norman Benson of the University of Lowell, Lowell, MA, who invited the researcher to be a guest at a workshop, "Teacher Morale, Job Satisfaction and Commitment: Lessons from Business and Education," held in July, 1985. The workshop clarified several concepts and further strengthened the perceptual validity of this study.

4. Blain Hartford, Director, Change Point, Buffalo, NY, a guest lecturer at the University of Lowell workshop, "Teacher Morale, Job Satisfaction and Commitment: Lessons from Business and Education," held in July, 1985, who contributed to the researcher's conviction of his goals and especially affirmed his concepts of flatter organizational models, the psychological dimensions of the workplace, autonomy, job satisfaction, morale, trust and respect, and other characteristics of improving QWL.

5. Research assistance was tendered by the following: Richard Morrill, University of Massachusetts, interpreted the researcher's needs

regarding STS/QWL in urban secondary education or public school education in general, providing descriptors for four ERIC searches. Dr. Frank Pratzner, Ohio State University, provided research literature and network leads.

6. Deborah Burnett Strathers, editor, Phi Delta Kappa Center on Evaluation, Development and Research, Bloomington, IN; and James Weber, Senior Research Assistant, National Center for Research in Vocational Education, Ohio State University, were contacted for information or current leads on STS/QWL in public school education.

7. Newman Walker, Superintendent of Schools, Palo Alto (CA) Unified School District, retired, as featured in Phi Delta Kappan (February, 1987), was interviewed regarding the possible relationship between the humanistic system and STS/QWL concepts and comparisons of a humanistic management model with an STS/QWL paradigm.

8. Robert Krim, Associate Director, Office of Personnel Management, City of Boston, who authored an action research dissertation (1986) on the public sector, was interviewed regarding content, applicability to education, and evaluation of the methodology of this study.

9. Newspaper articles, including "Classes in Chaos" (Wall Street Journal, May 13, 1982), featuring the Central High School as a negatively impacted school, and selected newspaper articles published in the Boston Globe relative to desegregation in the Boston Public Schools.

Data Analysis

Interviewee perceptual responses to each question were submitted to independent sources for analysis and fit into categories specific to (a) STS/QWL characteristics, (b) the study, (c) serendipitous characteristics warranted by a significant response rate or the perceptions of the interviewee and/or the researcher, and (d) attempt to determine the inadequacies and problems of STS/QWL for the study. Every interview is treated as a separate mini-case in which the responses are related to STS/QWL characteristics individually and then evaluated for positive or negative response levels. The results of these analyses and the field notes were programmed into an IBM PC utilizing a program (Paradox, ANSA Software, 1985) to produce arithmetical summations of the preliminary findings for interpretation. The interviews in the ethnographic summary (see Chapter 4) were selected by independent sources, conforming to the method for data analysis. (STS/QWL elements and their interdependent characteristics that offer to improve the QWL for staff of the urban secondary school environment are examined in Chapter 5.)

Archival and school system hard data as available, such as records of suspensions, pupil incidents, false fire alarms, and other data are presented to make simple comparisons of the three-year period centering on the year of the study in an attempt to draw conclusions.

Conclusion

The findings of this study are assumed to distill and refine those STS/QWL elements that offer to define improvements in the QWL for urban

secondary school staff as well as to determine the inadequacies and problems of STS/QWL. However, this study represents the first year of an intended long-term paradigm of the transformation process that was contaminated and prematurely curtailed by factors that were beyond the control of school-based stakeholders and that are not subjects of this study. Additional sites, experiences, and research will be needed to continue the refinement process.

The urgent need for an alternative paradigm is evidenced by the contextual turbulence of the Boston School System. It is supported by the 1986 reports of the Carnegie Forum on Education and the Economy (CFEE) and of the National Governors' Association Center for Research and Analysis (NGACRA). In addition, the recently enacted Chapter 188, The Education Reform Law, in the Commonwealth of Massachusetts legislates significant participative features. The solution offered for survival is the alternative paradigm STS/QWL. Communications with STS/QWL researchers and practitioners support this position.

The literatures reviewed in Chapter 2 attempt to foreshadow the position developed. The contextual turbulence and deficits contributed by all the actors are conceptualized in the position. Considering the number of years that the present educational system has been evolving, Gay (1987) made a salient observation: "Studying the history of education might lead one to believe not only is nothing new under the educational sun, but also that educators never learn" (p. 179).

Examination of the literatures of leadership participation and selected models present interesting perspectives, but do not offer flexible solutions. The Rand Corporation Report (1978) indicated the

need to include teachers in the planning process.

The position developed in the literatures of STS/QWL embraces the concept of teacher participation but directly challenges the validity of the technological imperative as an effective management model. The STS/QWL paradigm is offered as a viable alternative that offers a high participative-management paradigm based on the principle of joint optimization, which occurs when the socio-technical systems are treated as coequal dimensions, each a coproducer of the other. The socio dimension treats of human well-being--staff development; the production (technical) dimension treats of economic benefit--the demands of the workplace. The technological imperative considers people as unthinking and uncaring parts of production or the workplace. The alternative paradigm considers people as complementary or coequal to the production process or workplace. The former is further characterized by: pyramidal organizational structures incapable of responding to turbulence and increased external controls; reductionist tasks offering lack of choice and boredom; increased control and supervision; competitiveness among individuals; self-serving organizational goals and interests; and resultant low risk-taking. The latter paradigm, instead, is characterized by: a flatter organizational structure capable of flexible responses to turbulence; fewer controls and supervision, encouraging internal controls and self-regulation; variety of tasks that offer choices to the members; collaboration and collegiality between and among members; recognition of members' goals and the purposes of the broader society in the humanistic and environmentalist senses; increased commitment and innovation by members resulting in improved job satisfaction and performance by members.

Successes with STS/QWL in the private sector are well documented (Herrick, 1985c; Kanter, 1984; Trist, 1981). Similarities of many management problems in the private sector to those in public schools indicate the viability of enabling transferring private sector technology, process, and success to public schools. STS/QWL addresses all the issues reviewed in the literatures and goes beyond by binding all the pluses with the principle of joint optimization, a genuine high-participative management system. STS/QWL requires joint commitment from employee and employer and forms a catalyst for survival. Absence of the production/profit factor should foreshadow a significant reduction of teacher/administrator conflict and joint collaboration and cooperation among all persons in the public school repertoire.

The current wave of restructuring reports and legislation suggest STS/QWL paradigmic activities have been manifested in many public school situations or models. However, benign or benevolent school leadership without joint optimization does not translate to STS/QWL. An alternative to system-wide change, given the many problems, is school-by-school STS/QWL initiatives by risk-taking stakeholders, including the individual school leadership (Goodlad, 1984).

An STS/QWL paradigm system-wide initiative was expected to begin in the Detroit School System in September, 1987 (N. Herrick, personal communication, February 7, 1987). The need for a Boston transformation is in order.

CHAPTER 4

SOCIO-TECHNICAL SYSTEM CONCEPT (STS)/ QUALITY OF WORKING LIFE (QWL) ALTERNATIVE PARADIGM

Introduction

The primary purpose of this research was to evaluate the elements characteristic of the Socio-Technical Systems/Quality of Working Life (STS/QWL) applied to the change experience at Central High School (CHS), 1982-1983; to reflect on the literatures and the findings of the follow-up interviews; and to attempt to distill those characteristic elements that offered an improvement in the QWL of the faculty of CHS.

The problem of this research is to address the need to improve the effectiveness and the quality of education at CHS. The strategy selected is the alternative paradigm STS/QWL.

This selection was based on the researcher's notion that the paradigm characteristics offered the complete strategy to respond for survival to contextual turbulence, both reactively and proactively to improve the quality of working life in that environment.

Historical Background of Central High School

This section profiles CHS, identifies the historical and sociological changes critical to the structure of the school up to the year preceding the study, ending in June, 1982, and presents a contextual background of critical dimensions specific to the school and the study.

These include: (1) the organizational and management structure, the documents and archival records, the communication structure, the building plant conditions and environment, the working conditions and workload of both administrators and teachers; and (2) the individuals who played various roles in CHS: members of the Alumni Association, collaboratives, parents, faculty as members of the teachers union, the informal organization, the school climate, and, finally, the perceptions of stakeholders.

History of the School

The history of CHS is presented in two parts: the profile of the school, illustrated by a table of statistics, and the historical and sociological changes that affected the stakeholders.

School Profile. Central High School (CHS), the oldest comprehensive public high school in the United States, is located within one of the world's richest complexes of educational, medical, and cultural institutions. A Statistical Profile of CHS for 1981-1982, the year preceding the study, is shown in Table 4.1. The Statistical Profile of CHS Student Grades is given in Table 4.2, and Suspensions, 1981-1982, are shown in Table 4.3.

Historical and Sociological Changes. CHS was established in 1821 by the Boston School Committee (BSC) as a school for boys that would be an alternative to the Public Latin School (Boston Latin School), which had been established as a preparatory school for Harvard College and as an answer to the educational needs of the community and commerce of the times.

Table 4.1

Statistical profile of CHS, 1981-1982

	Number
Staffing	
Administrators	5
Instructors	136
Support	60
TOTAL:	201
Enrollment	
Regular	1,411
Bilingual	406
Mainstream	334
Substantially Separate	72
TOTAL:	2,223
Students by Race (%)	
Black	55%
White	26%
Hispanic	14%
Oriental	5%
American Indian (6 students)	.0026%
Attendance	
Average daily attendance 1981-1982	75.3%
Attendance rank of school urban district	8/8
Attendance rank of school urban system	11/17

Table 4.2

Statistical profile of CHS student grades

	Grade			
Student Achievement Reading Marks	9	10	11	12
1982 Median Profile	30	26	26	22
District Median Percentile	58	54	54	50
System Median Percentile	42	36	38	32
Numerical Rank Urban District	7/8	6/8	6/8	7/8
Numerical Rank Urban System	10/17	9/17	8/17	10/17

SOURCE: Annual Report 1982, p. 126; CHS School Report

Table 4.3

Suspensions, 1981-1982, at CHS

	Number of Suspensions
Central High School	1,036
Total for District	2,482
Total for System	5,483

SOURCE: Department of Safety Services, Final Suspension Report 1981-1982

Although CHS was established as a terminal education school, the quality of its education and students was such that colleges and universities soon found its graduates to be as well prepared for higher education as those who had attended public and private preparatory schools. CHS gained national and international recognition that carried into the late 1950s, when a slow but steady decline began. O'Malley (1979, pp. 9, 10) characterizes the decline by describing an inadequate, virtually unchanged classical curriculum dating back to the 1920s, mismanagement, and a teaching staff that was apathetic as well as insensitive to the pluralism of the city from which the students came.

In 1949, $10 million was set aside to construct a new building. This was announced at the ceremonial unveiling of bronze tablets depicting the Four Freedoms in the then-occupied Montgomery Street Building. The researcher was present as a cadet officer and as a graduating senior.

CHS moved to its present location, the former High School of Commerce, in the early 1950s. An exploding school population resulted in overcrowding and ultimately necessitated two annex buildings at different locations in the city.

In 1962, the Boston School Committee voted to establish CHS as the city's only four-year comprehensive high school. The feeder pattern for the school was drawn from that of schools in predominantly minority districts.

In 1968, the majority of the school population reversed itself from 85 percent white to 85 percent black.

July, 1970, witnessed the groundbreaking for a new CHS in the backyard of the existing structure, which, in turn, was to be demolished. Funding was provided by the state specifically for CHS occupancy. However, city-wide rumors that the BSC planned that the Girls' Latin School would be the occupants for the new structure persisted, in spite of public announcements to the contrary.

In 1972, the BSC, surprisingly comprised mostly of CHS graduates, validated the rumors by endorsing the move of the Girls' Latin School to the new CHS structure but failed to provide a new home for CHS. This significant decision was made during a period of high protest and violence, and unified the CHS community, which marshalled its forces to claim the new building. In 1972, the first female students were admitted to the formerly all-boys school, a significant event that was neither desired nor prepared for by the administration and staff of CHS (O'Malley, 1979). Equally disturbing to them was the designation that the new CHS would become the city's School for the Arts.

In a 1973 suit heard by Supreme Judicial Court Justice Kaplan, it was ordered that CHS be housed in the new tower facility upon its opening (In re Bradshaw et al. v. Tierney et al., 73-91 [Suffolk County Superior Court, Mass. 1973]). It was understood by the CHS community that if this case had not been heard and settled, the issue of the CHS structure would have had to be resolved by the federal court.

In June, 1974, CHS was a significant factor to Judge Arthur Garrity's June 21 desegregation order (p. 40). In this order, Judge Garrity pointed out the defendent's (BSC) systematic discriminatory practices. He cited deliberate racist feeder patterns established in the

latter part of the 1960s, the turbulence involved in the dispute over the new building's occupants, and the failure of the BSC to provide a new home for CHS when it attempted to give the new building to Girls' Latin School.

During 1974-1975, several significant events took place. First, school busing began under Phase I of the court-ordered desegregation, using a state plan that was poorly conceived (O'Malley, 1979). Second, under the Phase I plan, CHS was to become a district four-year high school enrolling pupils from Roxbury, a predominantly black district, and from West Roxbury, a predominantly white district of the city. Of the planned enrollment of 2,800 pupils, 95 percent would be new to CHS (LeGendre, 1979), and the staff would be expanded from 60 to 120. Third, this year would be the first year of occupancy for the new building. Fourth, it would be the first year of implementing a newly-enacted special education state law (Chapter 766), which mandated educational programs for children with special needs to take place in the regular school environment. Fifth, and not least, for the first time in the history of CHS, a member of a minority group, a black individual, would be appointed as headmaster of CHS. This headmaster's advocacy for options or alternative forms of education was to play a major role in changing the court-designed magnet theme selected for CHS during Phase II of the busing plan.

During the year 1975-1976, Phase II of the desegregation order changed the status of CHS from that of a district high school (Phase I) to that of a city-wide magnet high school in a newly-created ninth school district. The court-selected magnet theme was for the visual and

performing arts. The faculty and administration of CHS took a strong, negative position based on the following points: (1) The arts theme would terminate CHS's traditional position as a comprehensive high school; (2) the building would not be fully utilized; and (3) the arts theme was focused too narrowly for the maximum utilization of the existing staff. The administration and staff developed and presented through channels and counterproposal, Methods of Development Effective Learning (MODEL), which would create options or alternatives. MODEL was accepted and approved by the superintendent, the BSC, and the federal court. The basic structure of MODEL remained into the study year. However, the departure of the alternative headmaster to a higher position in 1977; the turbulent social, political, and economic conditions that followed; and eventual faculty burnout resulted in the expiration of many programs. Those that remained became shadows of their former selves. The collaboratives were established in 1975, the most notable being the programs of the University of Massachusetts (see Chapter 1) and of the Massachusetts School of Art. The University of Massachusetts program, although its role had expanded throughout the city schools, declined at CHS; the researcher was the sole CHS representative by 1982. CHS participation was to increase two years later.

During the years 1977-1982, the alternative supporting headmaster was replaced by a white interim acting headmaster who was, in turn, replaced by a black permanent headmaster. In this period, CHS spiraled downward. The fault cannot be ascribed solely to either the headmaster or the stakeholders, but must include the incredible chain of events in Chapter 1. The political, social, and economic forces that related to

the school system and to CHS were beyond the control of the stakeholders.

All of these events since the 1960s related to deficiencies in the quality of life for both students and working stakeholders. To document the events that shaped CHS would require inordinate writing and space, and is available in O'Malley (1979), LeGendre (1979), Peterkin (1981), Stec (1978), and other sources. This brief historical review foreshadows the rationale for offering the alternative paradigm STS/QWL as the attempted solution to survival which will be discussed in the planning and implementation section.

Contextual Background of the School Problem

The problem of quality of life at CHS must be examined against a complex contextual background. The following is a detailed analysis of the context in which the stakeholders worked and the roles and perceptions of the various groups.

Organization and Management Structure. Referring to CHS as he found it upon his arrival in 1974, Peterkin (1981, p. 66) described the organization of the school as "traditional" in that it was a pyramid structure characterized by (1) a headmaster, (2) assistant headmasters (AHMs), (3) department heads, a title later changed to Assistant Headmaster-Subject (AHM-S), (4) teachers, (5) aides, and (6) students.

Except for administrators, secretaries, housekeepers, and dieticians, all persons were represented by the Boston Teachers Union (BTU), which was the collective bargaining agent. In describing the authority structure, Peterkin (1981, p. 66) stated, "The headmaster interpreted school

board policy; these orders were carried out down the line," and added that ". . . the teachers union was a dominant factor in school politics." To be added later to the structure were the housemasters and the uniformed security personnel. Not described by Peterkin was the power and influence of the CHS Alumni Association.

The structure described by Peterkin (1981) was, in fact, the essential condition the researcher found upon his return to CHS in the school year 1977-1978, and carried on into the 1981-1982 school year. Something had happened to choice, sharing of power, and alternatives.

The authority structure was basically centralized at the very top. Control mechanisms consisted of four evaluations for teachers, computer-generated teacher subject class reports ranked by percentage of letter grades, the morning sign-in process, and real or ostensible supervision of departments by AMH-Ss and others in the structure. Finance and budget factors normally included in a control system were controlled first by central administration, which was responsible for hiring teachers and substitutes and also assigned for each school a pupil-per-capita expense that was normally used for books and educational material. Later, this was changed to include the additional expenses of postage; purchase, repair, and rental of machines; supplies, contracted services; and other items. The headmaster's allocation of the per capita apportionment caused rivalries and the formation of battle lines that separated administrators and departments.

The normal reward system of financial renumeration was nonexistent. The reality was the carrot-and-stick approach. Certain stakeholders, both instructional and noninstructional personnel, were perceived as

having been repeatedly given favorable assignments, often including the exercise of power and influence exceeding their scope, authority, and level. Other types of rewards were more personal, such as being allowed to leave school early for some impelling situation, real or imagined. The overall reward most apparent to the researcher, and supported through formal interviews, was involvement of the individual in an activity that addressed his or her intrinsic value system.

The following provides a description of conditions as perceived by the researcher: The Traditional line and staff model was the structure up to the study year. The headmaster was the final authority over policy and operation. The Traditional Model as Practiced at Central High School (Figure 4.1), in reality, shows that all staff and line functions reported to the headmaster. Although the assistant headmasters-administration (AHM-As) had responsibilities that were mostly concerned with discipline, other areas of responsibility were vague. Authority was as limited or as broad as the headmaster chose to allow. The headmaster retained responsibility for the day-to-day operations; the AHM-S had department responsibility. In spite of the job descriptions, long lost sight of, in practice, they had little or no authority or influence. Probably the most significant function of the AMH-S was to assign teachers to subjects, which could and would be reversed by the headmaster or by grievance procedure; to collect and distribute books; and to act as overall minion for the headmaster and selected, limited, or noninstructional staff. In the noninstructional administrative assignment areas, departmental members generally reported directly to the headmaster. This practice reduced the influence and authority of the AHM-S to less than those of the members of

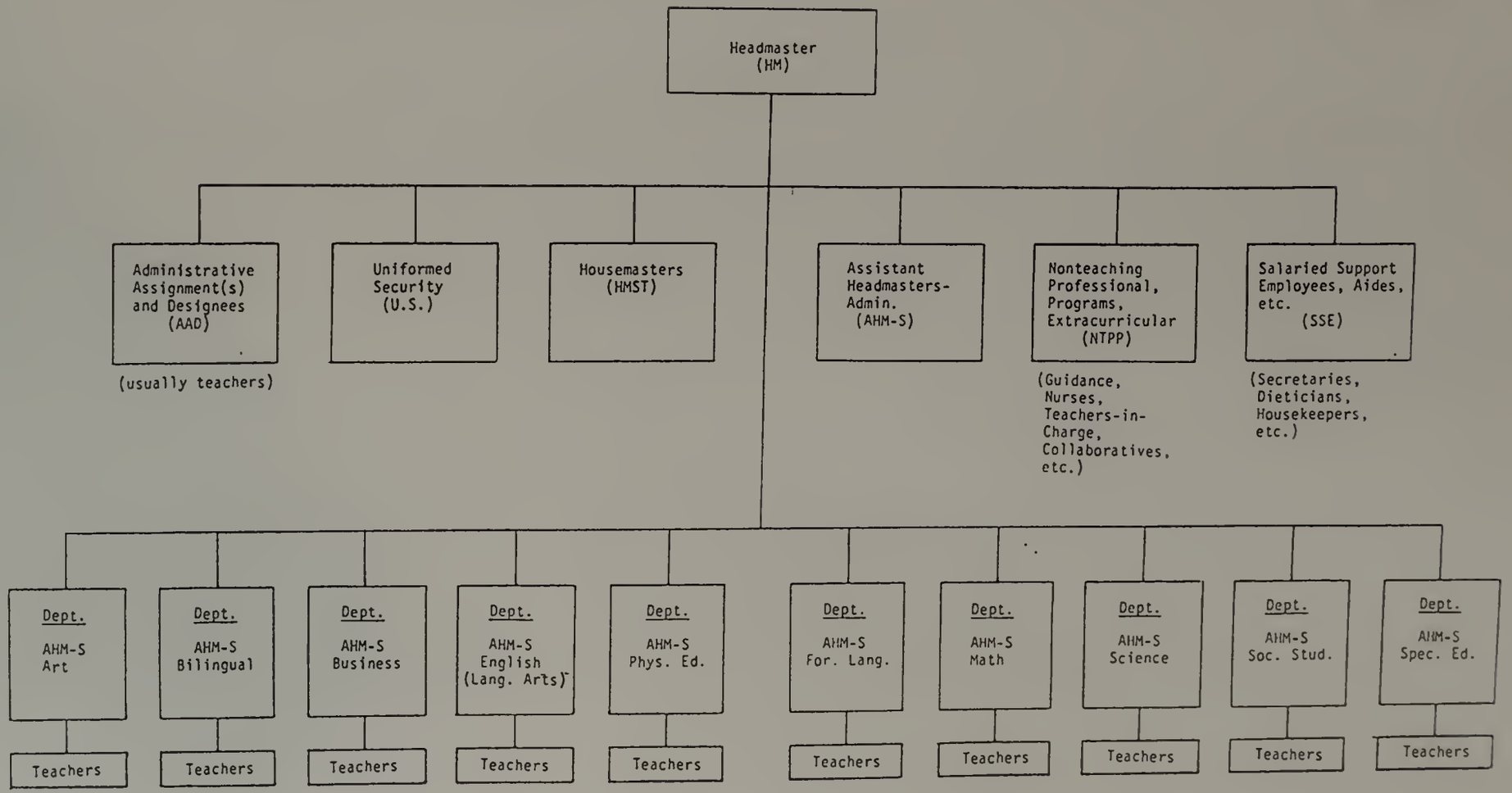


Figure 4.1. The traditional model as practiced at CHS.

his own and/or other departments--unless, of course, the AHM-S was in favorable proximity to the headmaster, a politician, or some other power broker.

One of the major weaknesses perceived by the researcher in the traditional paradigm at CHS was the underutilization of administrators, AMH-Ss, and teachers. The virtually total reporting system to the headmaster tied him to his office in the role of manager. Often long lines of people waited to see him, including student discipline cases and their parents. In addition, informal organizational affiliations with the headmaster tended to disenfranchise most of the personnel in the building, as expressed through personal interviews, often creating pockets and levels of dissatisfction among much of the staff. The president of the faculty senate reported that the headmaster's relaxed manner is construed by some faculty as a lack of concern (CHS Annual Report 1981-1982).

The only significant authority delegated was that given to housemasters, who were also members of the teachers union. Their duties were principally to administer the code of discipline. These housemasters were, ostensibly, not superordinate to the AHM-Ss and to teachers, but, in effect, they often passed informal judgments on teacher performance and evaluation that were outside the bounds of their authority or rank in the collective bargaining agreement.

Many interviewed stakeholders felt that the school could function effectively without the ranks of housemaster, AHM, and AHM-S. The majority of chores each performed could be effectively executed by uniformed security and members of a professional secretarial staff--most certainly by persons who had lesser credentials and who were trained in

handling administrivia. The headmaster, according to many stakeholders, allowed a degree of flexibility that permitted sheer taking of power and authority either as situations merited or as circumstances permitted.

The researcher's perception and recollection is that the headmasters from 1974 to 1982 ideologically rejected the teachers union. The headmaster was a member of the Headmasters Association and the Boston School Administrators and Supervisors Organization; the AHMs were members of the latter. The AHMs attempted to maintain a public neutrality or a contra position, as the situation warranted, but remained basically opposed to union activity or the union in general. This interpretative description should not be construed as characterizing the centralized authority in the school as being despotic--"benevolent dictatorship" would do or whatever they could get away with.

Documents and Archival Records. Formal documentation, including system rules and regulations, job descriptions, the collective bargaining contract for teachers, union central and district office documents, circulars, memoranda, operational documents, pupil attendance records, and safety and security data, were not readily available to all the stakeholders. Posted or circulated formal documentation requiring teacher acknowledgment by dated checklist was ignored by most of the teachers. All archival documentation was filed in the secretaries' files, the school vault, and the school supply room, where it was certain to be misplaced after a period of time.

Communications. Communications were basically informal. Written communication, such as daily attendance bulletins or district and central office circulars and memoranda, may or may not have been read by all and

may or may not have included informative news. Communication usually requiring dated checklists were posted in the teachers' sign-in cubicle, or, if deemed important, were circulated for a signature by the AHM-S. When the posting period specified by union guidelines had expired, it was expected that these communications had been seen and that viewers had elected not to sign the dated checklist.

Headmaster information was also communicated through each AHM-S weekly or at special meetings for dissemination to teachers and others, either informally, face-to-face, or memoranda generated by the AHM-S. This process broke down. Many problems could have been solved by prior discussion followed by communication to those who needed to know at any level.

Communications between teaching and nonteaching staff were generally informal and took place within given time frames and networks. The size of the groups depended upon circumstances.

Included in the communication network was the faculty senate and the union representatives who communicated with staff at various levels for their specific agendas.

In summary, the flow of communication could take any design or variation, depending on the circumstance. What the formal structure could not or would not do, the informal structure could and would do. The serious flaw in the formal communication system was the lack of horizontal formal and informal communication between departments and communications to all parties who needed to be informed. The former reflected the reluctant approach in organization; the latter reflected lack of knowledge in organization and, in addition, personal intent. Information

power was often used for personal, departmental gain, or for a particular network group.

Building Plant Conditions and Environment. The eleven-story complex includes "The Tower," which is the plant known as the A Building, and a contiguous B Building containing a total of twenty-seven exits. The A Building was originally built and specified to house an upper and lower house--a definition never fully developed--but this housing plan failed to materialize. It houses offices, regular classrooms and photography and arts classrooms, the library, TV studio, business machines and typing rooms, four cafeterias, a central kitchen in the basement, and lavatories for pupils and teachers. Travel between floors is by central escalators for all, elevators for teachers and handicapped persons. The A Building contains rear stairs for emergency egress.

The A Building was also used as an evening high school and summer school, though the summer school was terminated at the headmaster's request midway in his tenure.

The contiguous B Building contains the co-ed gymnasium, separate locker and shower rooms, an olympic-sized swimming pool, auditorium and lobby, theatre arts rooms, and offices that were originally specified as distributive education laboratories.

Conditions in both buildings were characterized by graffiti, uncleanliness, and obvious signs of vandalism. Equipment did not operate or was ripped off the walls in a seemingly systematic method. Ceiling tile had been ripped down, pushed down, or punched up, though ceiling tile and lavatories had been repaired at various points. At one time, when none of the pupil lavatories functioned, pupils used the stairwells as toilets

as well as for smoking, or used two or three remaining teacher lavatories. Day school teachers repeatedly reported numerous classroom and corridor irregularities after evening school use.

B Building was another story. An administrator characterized it as a "defoliated demilitarized zone." Although security patrolled the area, the unseen enemy struck when security moved its patrol pattern to another sector and after school hours. Assignment of one security person to B Building "full time" helped contain and subdue the activity, but the structure presented superior avoidance schemes to roaming students and trespassers.

The Wall Street Journal ("Classes in Chaos," May 13, 1982, pp. 20-21) describes the building as follows: ". . . a security team patrols the graffiti-covered halls in an attempt to deter class-cutting, theft, trespassing, and other disorders." A senior is quoted as saying: "[the school] . . . has gone wild. It's a distracting environment." Both buildings were difficult to maintain and clean.

In summary, the school could have been characterized as dirty, unsafe and insecure, and generally in poor condition.

Administrator/Teacher Working Conditions. The Annual Report of 1981-1982 of CHS indicates that working conditions for all stakeholders were poor. The researcher agrees, adding that one saving grace was the underground garage.

Administrators' working hours and the workload, and length of school year employment for professional staff, which included teaching and non-teaching staff, secretaries, housekeepers, and dieticians, were governed according to their collective bargaining agreements. Compensatory time

off or overtime pay was not contractual. Administrators worked a longer school day and an eleven-month year, and, on frequent occasions, exceeded the normal working hours and days. The headmaster, especially, was involved in an open-ended work-time situation.

The teachers' workday was 7:30 a.m. to 2:00 p.m. during their ten-month year. Some teachers worked to the time frames. Many exceeded both parameters, but were not compensated financially nor recognized in any other way.

AHM-S, housemasters, guidance counselors, nurses, and other non-administrative professional staff worked on an equivalent time schedule as the teachers as they were represented by the BTU. Some teachers were relieved of partial to full teaching loads to perform administrative assignments that were published annually, according to BTU contract. Teachers who had continuous duty on homeroom or undesirable assignments could request relief per BTU contract. Many administrative assignments were used as a patronage system and a perpetual system of power, control, and influence by both the headmaster and the assignee.

Secretaries, housekeepers, and dieticians, covered by their own collective bargaining agreement, were impacted to various degrees by the choices of headmaster direct and indirect administrative assignments.

In all positions, individuals were dissatisfied with the job, the bosses, the circumstances of the job, and the quality of working life. This conclusion is based on observation and frequent formal and informal interviews.

The Alumni Association. The Alumni Association was organized to be a benefactor to the pupils of CHS. It had a regularly elected board of

trustees, president, and finance committee. Normally, the leadership included famous and important people. The Association lost much of its former spirit when desegregation came to Boston. Many members looked back longingly to the old days. The Association kept only a slight degree of its former political influence in the school. Some of its influence was apparent to a few knowledgeable staff, but was not spoken of in the "wrong" places. The Alumni Association contributed toward normal school needs as well as toward scholarships, and also made outright grants to the headmaster for school use. As recollected by the researcher, the visiting on-site alumni representative attributed considerable blame to the BTU for most of the problems of the school and the city. He emphasized particularly the large role that the CHS faculty played in shaping BTU policy.

The Collaboratives. This section briefly refers to the evaluative statements in the Annual Report 1981-1982 regarding the three collaboratives: University of Massachusetts (UMass), John Hancock Insurance Company, and Massachusetts College of Art.

UMass has been the most prominent collaborative in CHS's professional development. Activity had been cyclical and was at a low point because CHS had experienced a massive layoff. Remaining staff were not active for varying reasons, including having graduated from the Boston Secondary Schools Project (BSSP). Because of their insecure positions, many were not interested in staff development activities. However, UMass continued to offer courses for CHS staff and to support various alternative programs for CHS students.

The business partnership with John Hancock had also gone through cyclical stages. At this point, activities began an upward spiral because CHS used John Hancock's facilities for word processing classes, prearranged student tours, including, for selected school functions, the company's Dorothy Quincy Suite.

The Massachusetts College of Arts continued to provide resources and field trips for art students.

The Parents. The Annual Report 1981-1982 evaluating parents' participation reflects almost none. However, an attempt was made to start a home and school association, and officers were elected. In contrast, student government and participation had reached new heights because of the faculty advisor's charisma.

Factors contributing to the low parent participation included working parents, parents' fears of traveling in the communities at night, lack of transportation to the school, and general apathy.

The Teachers Union and the Role of Teachers. This section highlights ancillary areas of interest to this study: background of the BTU's election as the teachers' collective bargaining agent, the organizational structure and collective bargaining position, central office-union relations, and perceptions of the BTU leaders and membership.

In September, 1956, when the researcher began his teaching career at CHS, more than 200 organizations existed within the school system, including teachers, administrators, special groups, and others. Teacher dissatisfaction with the quality of working life resulted in the identification and formation of three principle groups: The Alliance, serving an elementary and junior high school constituency; the High School Teachers

of Boston; and the BTU, which represented a broad-based constituency but had a low membership because unions were labeled "unprofessional." Both the Alliance and the BTU had a common ground: single salary. The High School Teachers Association opposed single salary because of educational experience and the number of examinations necessary for employment.

From 1956-1965, the Alliance and the High School Teachers Association assumed power during certain periods by supporting school committee candidates favorable to their respective positions. Single salary was the principal issue, and the Alliance finally won out. At the same time, the matured teacher shortage resulted in lowering of hiring standards of teacher education, experience, and examination scores. Thus, single salary was voided as an issue, and the organizations focused upon salary and other quality of life issues affecting everyone.

The BTU is organized in a typical hierarchical structure of president, vice president, treasurer, secretary, and various levels of field representatives. Included by virtue of the collective bargaining agreement are the building union representative(s) and the Faculty Senate. The BTU bargains at the city or local levels, but not at the national.

BTU and central office relations are both formal and informal. The informality may be denied by both parties because they have an adversarial relationship. Contra relations are evidenced by two strikes, periods of working without contracts, and the filing of numerous grievances. Informal relations have been used to settle easy differences before they escalate. The researcher's perception of some BTU leadership,

which includes its original structure, is that it often wore blinders. However, the presidents have been competent. At BTU meetings, some members' perception was that, in most situations, the union would rather strike than work; the perception of other members was that they would rather seek a negotiated settlement, but, where that fails, they have little choice but to react. Many BTU members told the researcher of their dissatisfaction with the union, categorizing as ridiculous union demands on many items because things could be worse. This reflects a tendency for teachers to conform to adaptation level theory. As they became accustomed to a negative situation, they accepted it as normal. The researcher's perception is that, as the work system is presently organized, the formation of a unified collective bargaining agent for all levels of school system employees would be an asset. A better answer would be a city-wide bargaining agent for all types of employees. Without such an agent, multiple collective bargaining agents are needed for survival and preservation of human dignity.

In the spring of 1965, the researcher, as treasurer of the high school organization, and four high school building representatives, which included an additional person from CHS, met in New York with the head secondary school representative of the New York union and the teachers lobbyist to the New York General Assembly. The main subject discussed was the affiliation of all levels of Boston teachers with the New York teachers union or with the AFL/CIO teamsters union, as well as other issues that could lead to improvement of the quality of working life. When these discussions were reported back to the individual schools, union affiliation of any kind, especially with the teamsters

union--which was proposed--was rejected on "professional" principles.

Meanwhile, events were moving rapidly in the school system. In the fall of 1965, as a result of the collective bargaining law, the Teachers Alliance and the BTU were opposing each other to represent the teachers of Boston. The CHS faculty was perhaps the lead group in the central and district high schools in supporting the BTU--a complete reversal of its stand six months before. It should be noted here that the central high schools--CHS, Boston Latin, Girls' Latin, and Technical and Trade High School--were the core secondary schools in organizing activities. The district schools were in some sort of limbo. It was also interesting to note the militancy of the women in the High School Teachers Association, who had shunned unionism several months before. The BTU won the election of November 9, 1965. The evening of this date was also the night of the electrical blackout, when much of the Northeast lost power, so some of the voting took place in the dark. The Alliance challenged the results in court, but the court upheld the BTU victory.

The Informal Organization, Network Context, and Culture. This research focuses on staff, since the staff comprises the major stakeholder cohort, numbering approximately 130. This discussion describes the informal organization, the network, the type of members and their capabilities, and the contextual and cultural makeup of the membership.

Several informal organizations existed at CHS. They can best be described as fluid, concurrently bounded and unbounded. They can be

described as an outer circle or structure that is bounded and that contains one or more inner circles which are fluid and unbounded, capable of acting alone and/or absorbing the outer circle. The outer circle can represent the bounded turf of a group. The inner circle can comprise the several common and individual areas of ownership of its members confined within the security of the outer structure.

Staff may hold membership in one or more circles or subsets, thus forming a socio-political network. Group loyalty varies according to power, influence, and the need of the collective or individual constituencies of the group and/or its operational network.

Informal organizational membership revolves around various criteria. Some examples of criteria are areas of academic, societal, departmental, and cultural levels, racial and/or ethnic status, membership in the faculty senate, the BTU, extracurricular activities, athletics, or simply commonly shared time frames. One network group socialized daily after school. Another, which included the first, socialized once a week. Another network group was considered to have direct access to the headmaster. Perceptually, each network group indicated others for in-house political ends or other ideologies. The latter network was indicted by all. Regardless of this variance, a societal cameraderie existed among most of the communication network groups. In whatever instance, the groups were capable of varying degrees of power and influence. What was apparent was that, more often, the informal meeting time allocated for resolution of problem(s) indicated the informal organization's excellent grasp of school problems and their interdependencies. Since these group members were closest to most of the problems, they readily perceptualized

or identified breakdowns in the school's organization or pupil as well as teacher control mechanisms. When no duty to act was perceived, group members may have chosen whether or not to act. The researcher maintained a reserved association with several of the informal organizational groups for professional, political, and intelligence reasons. Association crossed several groups and boundaries for survival. These associations afforded the researcher a unique position and opportunity for observation during the study year. What was (or should have been) most obvious to observers was the ability of the informal organization to respond (cut the red tape) according to the exigencies of the occasion--an advantage not utilized by the formal organization. Such adaptiveness and flexibility were also observed of most of the staff and aides at South Boston High during the first explosive days of busing, when school leadership and staff were palpably abandoned by all "leaders" outside the standing organization. The formal and informal organization was impacted by the contextual climate and biological culture of the organization in the societal sense.

The broad and local context of the study and situation has been presented in Chapter 1. The following discusses the contextual and cultural dimensions impacting the staff. Although an in-depth, formal, demographic study was not attempted prior to and including the study year, examination of the school template--the listing of staff names, addresses, and racial composition--reveals that a majority of the staff lived within the confines of Boston proper, with the remainder equally split between living within the Boston metropolitan area and in the suburbs of the city, except for one person who commuted from

New Hampshire. The members of the informal organization described above, by virtue of interest, maintained school-community relations because of the convenience and distance of their commute. The faculty was diverse and spread out over a wide geographic area. For some staff, these conditions inhibited after-school socialization; for others, finances, higher education responsibilities, and other reasons precluded participation. Therefore, the groups that had the time and fewer after-school responsibilities tended to meet frequently--often daily--and exhibited more power and influence. Many persons had taught at different school levels and in different school systems as well as in private schools. There were five doctoral level persons on the staff. Some staff had extensive involvement in entrepreneurial ventures, which made them role models, providing both intrinsic and extrinsic rewards not available in school, and expanded their thinking about school policies and problems, organization, and management.

An attempt to view the culture of the staff revealed that many were disappointed with the circumstances of teaching. Some, if they had had additional skills, would have made a career change. The vast majority expressed contempt because of the constant threat of job instability, and the lack of a safe and secure environment. However, for the many, teaching remained a good job, though not as good as it was. Some made this latter distinction, but were first employed during the desegregation period. For many, the circumstances of teaching and the leaderless periods made them capable of self-regulation and independence.

Another dimension surfaced with the desire for a safe and secure environment. A pervasive fear was evident in the daily pupil-teacher

confrontations during passing time when teachers were clearing the corridors. A significant cultural dimension was observed among the various group memberships and in general. Many of the white males had had military experience which fostered military thinking and terminology and a macho dimension to their behavior. In and out of school, this was evidenced mostly among the younger veterans of the Vietnam era as well as veterans of Korea and World War II. Minority staff were perceived to be more low-keyed in their behavior. However, white, black, or bilingual, a dichotomy existed: self-regulation, independence, and democracy overroad any formal or informal inhibiting mechanisms.

The female staff were virtually in total agreement on women's liberation and affirmative action. Younger female staff, although in consonance with the younger males on many issues, were unrelenting in demanding their rights. Very often, they initiated direct confrontations and challenges to male domination and the macho man. In Tyak (1974), different sources refer to women as "the lady sluggers." The researcher's experience leads him to assign the label "lady tigers." In many instances, the women demonstrated more militant attitudes than those of the men. Some women claimed equal rights but exempted themselves from participation in corridor confrontations or perceptually combative situations or positions, as did some men.

For most staff members, teaching was fundamental to their economic survival. To enjoy a better quality of life, many assumed second jobs, and others were part of two-wage earner or multiple-person complexes in order to earn more money or cut costs.

The School Climate. In the Wall Street Journal article "Classes in Chaos" (May 13, 1982), a teacher holding the rank of AHM-S describes the school climate as follows: ". . . There is a constant unrest that eats away at schooling," adding that she sent her children to private schools because "I don't have faith to trust my kids to the system."

The same article commented that "the fiscal problems have wrecked teacher morale and, in some cases, reopened the wounds that accompanied the school district's eight-year-old desegregation plan."

Stakeholders' Perceptions

This section gives a brief commentary on various stakeholder group perceptions. These are related to the study year and interpreted from observation and/or face-to-face discussions up to the study year.

School Committee, Superintendents: Central and District Level. From the levels of both policy and governance, the school committee and superintendents on the central and district level shared a perception that school staff, especially unionized members, were problem-makers. Management prerogatives were or had been eroded by the BTU. The "get tough" stance was perceived as the way to deal with people.

The Headmaster and Assistant Headmasters. The headmaster, although he was, at some point, a part of the informal organization, candidly stated his negative perception of the BTU in the Annual Report 1981-1982. As previously noted, the AHMs shared these sentiments. However, their attitude varied with circumstances in their relationship with teachers. As administrators, they lacked real authority or power. Two of the three AHMs were banished to the upper and lower houses, ostensibly to supervise

the housemasters, but actually to assist them. The third AHM had authority over the main office and was also involved in disciplinary cases. Administration attitudes, mannerisms, and traits did not earn the respect or admiration of the vast majority of stakeholders. These sentiments were often reciprocal, as evidenced through interviews.

Assistant Headmaster(s)-Subject (AHM-S[s]). As noted above, the AHM-Ss lacked real authority. The hierarchy that existed between academic and nonacademic departments also influenced morale. The extra remuneration, title, and time may have been used to better advantage.

Some AHM-Ss verbalized criticism of the BTU, especially about personnel and seniority rights for departmental members who were perceived as inadequate, incompetent, or assertive and/or aggressive toward them. Attitudes varied with each AHM-S depending upon his or her longevity, power, and influence, and, in some instances, control functions over their respective departments. In general, most worked at their jobs and saw themselves in a capacity agreeable with the company they kept. Delegation was not perceived to be one of their virtues.

The Housemasters. Interviews have supported that housemasters more than earned their teacher's salaries. Theirs was definitely not a plushy patronage position. They were perceived to exist in combat situations. Their working conditions were poor. They gained insights not available to most stakeholders. Housemasters' judgments of teacher performance in dealing with pupils were constrained and "confidential"; their perceptions were often split between those of administration and staff as events warranted. They maintained a professional demeanor. However,

this position might be better executed by trained, uniformed security personnel.

The Staff. The staff was a dichotomy. Factionalized more often than not, staff members had common adversaries: the BSC, central and district administration, the school administration, the AHM-Ss, guidance counselors, the persons who scheduled classes, the pupils, the parents, and all others who entered the school. A school-wide common agenda was more often elusive. Staff members were not unanimous in their attitude toward the BTU. However, they could be expected to be unified in a strike or in defense of one of their own. The researcher considered the faculty as a high-powered aggregate in the intellectual and ideological senses.

The Union Representatives. The size of the BTU membership in the school contractually called for seven representatives including one senior representative. As a rule, union representatives enjoyed good working relations with the administrators. There had been serious conflicts between certain representatives and the headmaster about grievances and issues relating to the quality of working life. The job is sensitive, and the representatives took it seriously. Some representatives had a perception that some of their members needed serious remediation, and some had a perception that administrators should not be trusted.

Faculty Senate. Perceptions held by the faculty senate can be best described by the following summary from the senate president's statements in the CHS Annual Report 1981-1982:

> This is my third report. I still dislike the superficiality of the instrument. As usual, it is a personal reflection. We share with the rest of the system the burdens of policies we did not, for the most part, create or cause to be created. We are bloodied--and painfully bowed. Much of our energy is devoted to personal survival and complaining about a world we miss.

He goes on to report that the physical conditions of the school are that it is still filthy, the escalators do not work, the headmaster's relaxed attitude contributes to a sense of powerlessness by faculty and a low sense of morale. Students reflect this through absenteeism. Scheduling and discipline problems are rampant and must be addressed. He concludes by naming as a priority the need to create an atmosphere where meetings between staff and students will "be meetings of allies, not adversaries."

The most common observation verbalized by all stakeholders was that of fixing blame for what was wrong on everyone else and expressed dissatisfaction with the quality of their working life.

Source material for the school profile and history is replicated in prior research and in school and system archives. Unless directly credited to specific authorship, the following primary and secondary sources were used: LeGendre (1979); O'Malley (1979); Peterkin (1981); Central High School Annual Report 1981-1982; BPS Department of Safety Services, Final Suspension Report 1981-1982; Boston Public Schools superintendents.

More specifically, the following sources apply: Central High School Catalogue 1949; the Record One Hundred Twenty-Fifth Anniversary, Alumni Edition, May 1946; America's First, Robert Carroll, Assistant Director of Staff Development, BPS.

Summary

Starting in the mid-sixties, CHS entered a turbulent period in its history. It began a downward slide. In the seventies, desegregation in schools became an increasingly important issue, culminating finally in the landmark decision forcing desegregation of the Boston Public School system.

The contextual variances affected every dimension in the school. Evident was the lack of a cohesive organizational strategy that would enable the school inhabitants to join together, motivated by a change strategy with shared goals and values, and a philosophy that could be used to improve the quality of their working life. Such a strategy was identified and sanctioned: The STS/QWL paradigm.

STS/QWL Planning to Implementation

The headmaster and the researcher, with selected stakeholders, undertook the initial planning and implementation of the STS/QWL paradigm at CHS. This section describes the roles of each in the initial stages and indicates briefly the roles of the stakeholders.

Researcher's Participative Credentials and Qualifications

The researcher's concurrent careers in education and business formulated the principal background for selection of the STS/QWL paradigm. This background has taught him to appreciate the importance of the sharing of authority and the recognition of human value in the workplace.

The positive implications of this shared leadership in both the formal and informal organization of schooling are supported by experience and formal interviews with stakeholders. Among these with whom the researcher had worked as a colleague was to become the acting headmaster of SBHS during an interim period. His experience with turbulence and shared leadership foreshadowed his response when he was asked to assume new duties as headmaster at CHS late in August, 1982.

STS/QWL Roles: Headmaster, Researcher, Stakeholders

The initial planning session between the headmaster and the researcher and telecommunications with available stakeholders included establishing roles for all stakeholders. In response to a faculty senate president's query, the headmaster demonstrated to the various administrative levels, by example, that the sharing of power, authority, and leadership was a reality. He was to share the success of the program, to be the resulting end resource if needed. He dealt, one-on-one, with the several real or perceptual needs of stakeholders. He represented the school in internal and external affairs and otherwise relieved some stakeholders of "set-piece office administrivia." In sum, he led, rather than managed, in an atmosphere of trust and respect.

The researcher's role was: to manage the set-piece office administrivia, to be the STS/QWL facilitator or program director, and to be the internal and external resource and coordinator for the AHMs of the upper and lower houses and for the stakeholders, if necessary.

Both the headmaster and researcher would become prime advocates, initiators, and diffusers of the STS/QWL paradigm; countervail each

other in situations warranting difficult decisions--usually, extraordinary situations that did not involve faculty; allow and help make things happen; and become effective learners, resources, and diagnosticians.

The planning session concluded with an 85-item agenda prepared for the administrator's meeting and a 50-item agenda for all staff meetings.

All the stakeholders, including those in a titled position at any level in the organization structure, were involved directly or indirectly. Untitled persons in untitled positions were involved with reference to their programs. None involved were from the policy or governance level. The roles each played were dependent upon their titled or untitled positions as well as their positions as stakeholders in the informal organization. The principal role was to contribute toward institutionalization and diffusion of the STS/QWL paradigm.

Implementation Process and Evaluation

This portion discusses the movement from planning to implementation of the STS/QWL paradigm. Included here also is a discussion of the process used to advance the mechanism and the obstacles and contaminants encountered. The evaluation section discusses the evaluative mechanism that includes a discussion of hermeneutic reflective and critical discourse.

The interim between the planning and the implementation stages was an exercise in controlled anxiety for either anticipated acceptance or at least neutrality, rather than a negative reception or outright mutiny

of the stakeholder cohort. At that point, the change strategy was perceived as a guardedly optimistic strategy.

Implementation

The first several days of school were spent in face-to-face interviews with numerous stakeholders to explain and reemphasize the scope and nature of empowerment-delegation to the many stakeholders with specific assignment responsibilities on the organizational chart. Most people accepted the change guardedly, obviously disbelieving the high degree of empowerment. Others showed signs of pacifying the initiator--or "boss," attitudes such as "I'll do what I want anyway, as usual." A few simply did not understand, or simply had an investment in dissatisfaction with anything.

The more challenging face-to-face meetings occurred with the AHM-Ss (first-line supervisors). The interviews were concerned with responsibilities, personal development and that of their department's staff, methods of the alternative model and, just as important, the basic values and assumptions of organizational philosophy and people--especially at CHS. All AHM-Ss offered to help out in any way. Some offered to provide feedback. They were reminded that they were empowered to do whatever their new roles called for and to get all concerned parties involved. Two others saw the alternative model as a device to replace them. One AHM-S described the model in barnyard expletives.

At the conclusion of these meetings, the model was considered to be fully operational for a trial period. From this point on, it was a question of determining the extent to which the headmaster, researcher, and

invested stakeholders could implement, institutionalize, and diffuse the model in this, the first year of a hoped-for, five-year, stakeholder-designed plan. The minimum critical specification had been supplied. Now, it was up to them. Descriptive communication, in addition to the organization chart distributed, was withheld intentionally by the researcher after discussion with the headmaster and several stakeholders. The reason was the unexpected incursion of a central office school improvement initiative, which will be discussed later as a contaminant.

Help Sought, Denied, Reason, Compensated. To implement the new paradigm, no help was either sought or obtained. The stakeholders initially proposed to become the initiators. They were to do it after presentation. Beyond that, the implementation was intended to be developed and owned by the stakeholders.

A request for School-Based Management status sought through the district and central offices was denied. A central office initiative was already involved in the school. No attempt was made to compensate for the rejection. However, from the perspective of the resident stakeholders involved, the STS/QWL paradigm was sufficient. In addition, the attitude was that central office contributed little if anything to school improvement--especially to improvement of the quality of working life.

Obstacles. Obstacles included several stakeholder groups; the size of the building; the state-regulated population; the BTU; and the anticipated possibility of direct interference by the policy and governance levels. The stakeholder obstacle was overcome by face-to-face reflective critical discourse and/or by group/team discourse. Some stakeholders had

an investment in being disgruntled. The building size was dealt with by increased corridor presence of administrators without teaching loads and their empowerment to determine suspension as well as "new" powers for the uniformed security persons. Guidance counselors voluntarily became visible during the high-incident period at midday. The state-regulated population were extremely problematic. They appeared to have open license to flagrantly violate any rule or guidance system. The BTU never got involved because, although its representative and some members understood what was happening, many more did not grasp the full meaning of the model. In addition, it was the researcher's perception not to arouse the BTU.

Unanticipated Obstacles. The unanticipated policy and governance level obstacles are best characterized as contaminants. They comprised two central office-sponsored initiatives which became, in effect, competing, divisive programs. Their success and source of power foreshadowed the end of the STS/QWL experience from the outset. These obstacles were not overcome. Instead, they overcame the STS/QWL paradigm.

They affected the school-based initiative in two ways. First, they interfered with the entire program, from implementation to institutionalization and diffusion. Second, they changed the behavioral patterns of many stakeholders from neutrality to resistance of the new alternative, which most endorsed in principle.

However, the STS/QWL experience evidenced many successes. The characteristic of being able to deal with change and turbulence is implicit in the STS/QWL concept. The philosophy of taking an organization from where it is to where it is going--especially with the existing

stakeholders--is the greater challenge.

Evaluation

The mechanism and framework used to measure the successes and failures of the new program are presented in Chapter 2 as the common-sense approach (Emery, 1982), including hermeneutics and reflective critical discourse, through determining visible and intersubjective evidence to see what is working and what is not working. Quantifiable measures were not adopted nor attempted since the program itself was not prescriptive, and because contaminated measurement was to relate to STS/QWL principles, process, values, and philosophy. The basic measurement mechanism relied on the researcher's notes and intuition, formal and informal feedback, and written communications. The measurement activity was on a continuous-duty cycle in conjunction with the stakeholders, as a shared activity, an activity in which initiating stakeholder judgment was often accepted by all involved.

The evaluation mechanism was a continuous activity in on-site inquiries and observation as to the status of program implementation. Mechanisms, measurement, and evaluation allowed stakeholders their own space to grow in, the opportunity to "try ideas out." Modification was always simple, beginning again with the consensus, "If it works, leave it; if it does not, bring back the solution(s)" as a minimum critical specification.

The intersubjective agreement of improvements or the status of improvements in the quality of working life as characterized by elements of the paradigm was measured.

Feedback from persons external to the system was positive in assessing safety, attitudes, and satisfaction and morale, in addition to positive reflections on the effectiveness of stakeholder empowerment which was producing positive results in the business partnership collaborative.

Written communication commending the headmaster and the researcher and recommending that they continue in their positions the subsequent year was transmitted to the superintendent from the business partner and president of the parent organization.

Developing Goals and Planning

The headmaster, the researcher, and available stakeholders worked together to develop the STS/QWL goals, and planned the implementation of the alternative program. A description of the steps they took follows. The new headmaster and the researcher began an informational session for stakeholders in September, 1982. The planning goal was survival.

The STS/QWL model was deemed best suited for turbulent situations. It was adaptable, flexible, and, as a system of interdependencies, involved everyone. It would be deputizing them as decision-makers.

It was apparent that this, or any, headmaster needed all the stakeholders' help. The traditional model was inhibitive and inflexible. The headmaster appreciated the circumstances and sanctioned the STS/QWL model--clearly understanding its characteristics, values, and philosophy as the best for CHS and the turbulent environment. Commitment was intended to be long-term. The reality was, however, that planning time, conditions, and process were going to be minimal or nonexistent. Ideally, a first year in-house staff development program would evolve.

This was impractical and, therefore, was waived. In effect, we would have to make a soft-sell presentation, thus enhancing the need and usefulness of the informal organization, which was later to serve the program well during its brief tenure.

It was decided (a) if the STS/QWL paradigm was to work, all of the parties, starting with the headmaster, would have to speak with the same tongue (Trist, 1981), and (b) to demonstrate this, the STS/QWL paradigm must be perceptually implemented in its purest form. That perception focused on a set of organizational values and philosophy, which included shared leadership and a genuine sense of mutually earned trust and respect.

The perception was an involved faculty that would be expected to improve both the staff development and the quality of education with a focus on teachers as well as administrators. All stakeholders would be encouraged to assume leadership roles in problem resolution ("the problem finder is the leader," not necessarily an administrator) with the exception of (a) those specific issues whose legality clearly rested with the administrator, and (b) contractual issues of the system, unless resolve was possible at the building level. These would be open for discussion, when decisions would be based on consensus-negotiated settlement with mutual trade-offs. This mutual satisfier (use of hermeneutics and reflective critical discourse--keep talking) was deemed the most useful and effective vehicle for goal achievement.

As part of the minimum critical specification principles:

- All stakeholders would be encouraged to become involved in generating, planning, and coordinating organizational and educational

issues at any level.

- A guidance system or strategy to provide a support system for the involvement mechanism (LAC) would be created.
- Stakeholders would be expected to generate problem solutions and subsequently execute and design the change for mistakes they were responsible and accountable for.
- Staff development would be ongoing learning from each other's experiences, invitation of external resources for enhancement of a wide range of topics in leadership participation, decision-making, team-building, finance, management, economics, law, and others. Stakeholders not willing to become involved could exercise choice over this program and environment and would be accommodated as permitted.

These elements addressed the STS/QWL characteristics directly in implementing the values and philosophy, addressing the individual stakeholder as part of a human system capable of being developed for his or her own sake, and, in addition, to address the social and psychological needs of the person beyond the normal contractual or conditions of work. These values and this philosophy lead toward the setting of organizational goals and objectives, all of which were subject to stakeholder reconceptualization.

These goals and objectives, again set as minimum critical specifications, addressed the following priorities:

a. Survival

b. Shared leadership and autonomous teams, STS/QWL paradigm characteristics and elements, values, and philosophy

c. Communication

d. Accountability--Stakeholders

e. Programs and Alternative Programs

f. Curriculum

g. Budget, Finance

Because the STS/QWL paradigm is adaptable, flexible, and recognizes the culture of a system, the priorities are interdependent, fluid, bounded and unbounded as the circumstance(s) fit. Stakeholders were expected to respond positively--as prior observable experiences had demonstrated. The organizational values, philosophy, and priorities led to the perception and the organizational structure that would evidence the STS/QWL paradigm and concurrently respect the BPS table of organization (T.O.).

The Alternative CHS STS/QWL Organizational Structure shown in Figure 4.2 was perceived by many as atypical. It was. Yet it included the Boston Public Schools table of organization.

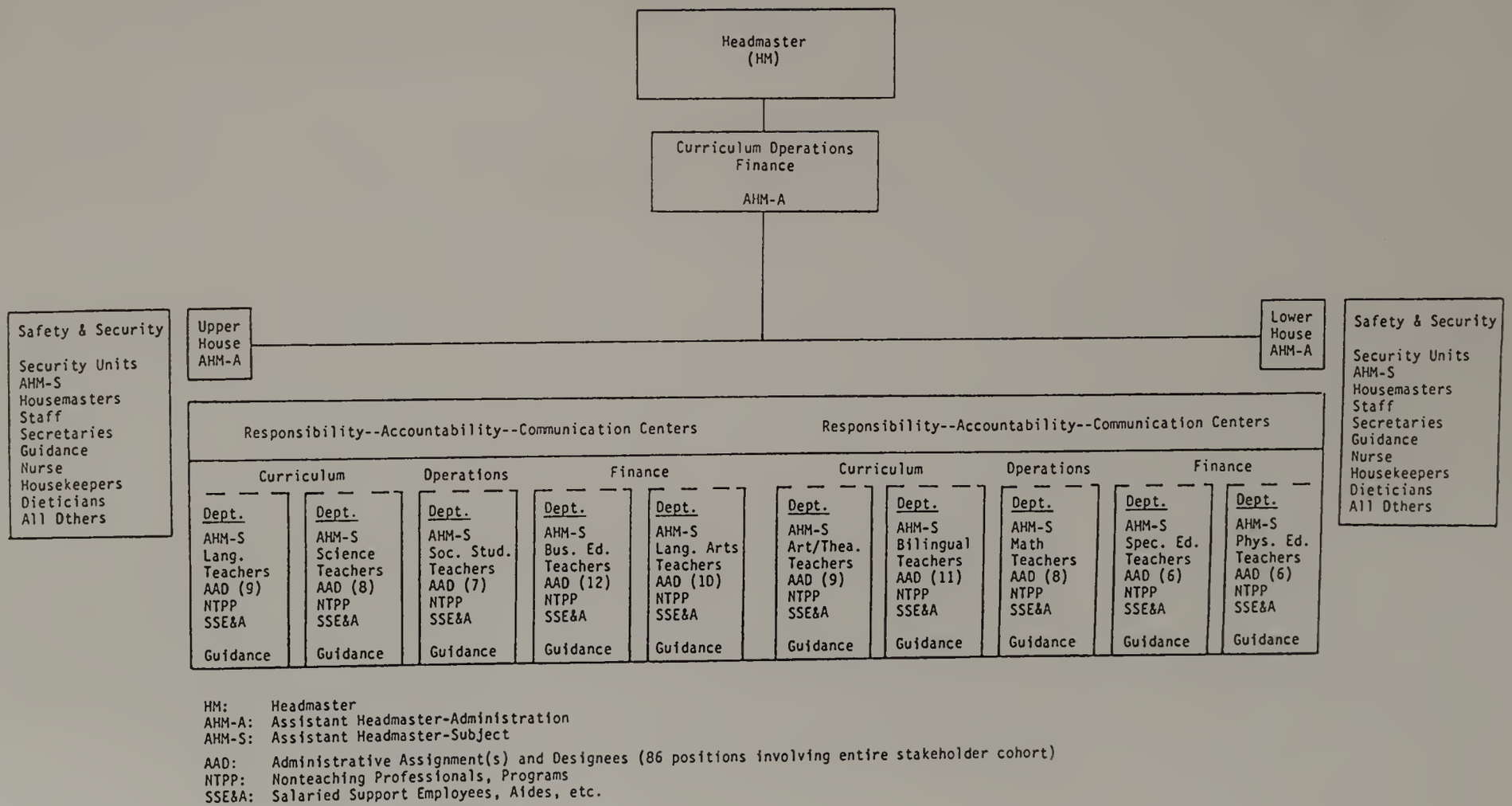
The organizational structure attempted to address the following:

1. A perceptual need to show everyone where they now belonged in the redesigned model.

2. An organizational need to preserve the normal BPHS structure but also involve stakeholders.

3. The traditional obstacles of the administrator political levels when power and influence are moved from the traditional power sources.

4. Equalization of the inordinate amount of power and influence held by many in-house appointed leaders, which was disproportionate to their levels and circumstances in order to create a sense of fairness and equality among stakeholders and to reduce the conflict elements.



HM: Headmaster
AHM-A: Assistant Headmaster-Administration
AHM-S: Assistant Headmaster-Subject

AAD: Administrative Assignment(s) and Designees (86 positions involving entire stakeholder cohort)
NTPP: Nonteaching Professionals, Programs
SSE&A: Salaried Support Employees, Aides, etc.

Figure 4.2. The alternative CHS STS/QWL organizational structure.

5. The need for a starting point to take the standing system from where it was to where it was going, based on STS/QWL shared principles, utilizing existing resources and stakeholders.

6. Communications comprising two dimensions: The first would follow the redesigned structural lines for appropriate administrivia; the second would allow communications in the bounded and unbounded sense, regulated by the LAC guidance mechanism, at or between levels, departments, and groups as appropriate.

The redesigned structure that evolved out of headmaster, researcher, and available stakeholder telecommunications placed the headmaster at the highest level. To exemplify the sharing principle and the BPS T.O., the researcher, as an AHM, was placed directly below the headmaster and worked with the administrative assistant. The two AHMs were placed at the next level, which gave them the power and plenitude of the headmaster with responsibility and authority for the upper and lower house. All activities of school operations, curriculum, and budget fell within the plenitude of responsibility of each respective house. Mid-level administration (AHM-S) remained essentially responsible for their appointed curriculum areas and were also given responsibility centers and the same power and plenitude to deal with curriculum-related concerns in addition to the newly-assigned areas of extracurricular and internal operations and budget. This level also included leaders of various school functions and activities formerly appointed by the headmaster. These persons would also have the power and plenitude to discharge their duties that were allowed by the redesign. Guidance counselors became co-professionals within departments sharing in the same power and scope to make decisions

relative to their circumstances.

To reflect the interdependencies of the total system and the intra-system communications flow, reporting lines connect all responsibility centers. All responsibility centers are implicitly able to communicate openly with the headmaster and with the researcher as program facilitator as well as between levels. Decisions were to be made at the responsibility center levels.

The structure indicated Responsibility, Accountability, and Communication Center (RAC):

- Responsibility indicated who was responsible to get what done, as well as a second person who could step into the position.
- Accountability indicated who was responsible as well as accountable and who was determined to give the account.
- Communication indicated everything had to be shared publicly.

The structure guidance system included Legality, Amenities, and Communications (LAC):

- Legality empowered all stakeholders to act within a framework of identifying any act and subject both within the purview of the stakeholder and legality in the school and civil sense.
- Amenities required all initiators to acknowledge all stakeholders whom a decision could affect, however remotely, by becoming involved and also by understanding the organization and management system as systems of interdependencies. This label included the condition that initiators would not embarrass any stakeholder(s) or the larger system with a decision; would determine how many problems, if any, the solution would generate; and would solve them. Finally, communication required that the

final decision be communicated to the community, including all stakeholders needing to know of the action/activity.

The LAC was, in fact, the empowering and regulating or overseeing mechanism in the ideal sense.

Presentation of the STS/QWL Paradigm

The STS/QWL paradigm was presented to administrators and stakeholders during two separate meetings at the beginning of the school year. Both the headmaster and the researcher communicated the alternative program to these groups following similar agendas at each meeting.

Presentation of a school-based management initiative with limited employee involvement may be construed as another indicator of management by fiat. The minimal inclusion of a small number of stakeholders due to the circumstances of time available and many pre-presentation face-to-face discussions with stakeholders and various elements of the informal organization voided the notion of governance by administrative fiat. The pre-presentation discussion encouraged positive presentation to the administrators and to all stakeholders at their respective meetings.

Administrators. On September 7, 1982, a preliminary courtesy meeting was held with two existing AHMs. The anticipated changes and new roles and political sensitivities were addressed. Additionally, the concurrence that their new roles provided them with an appropriate fit between the job and their professional development was assured by assumption of their genuine responsibilities and authority. In effect, each would be "running" his or her own school.

Another meeting was composed of all administrators, including AHM-Ss, uniformed security head, support service supervisors, guidance persons, support persons, BTU and faculty senate representatives, and several in-house activity appointed persons-in-charge.

The headmaster gave a brief presentation of his background and the circumstances of his appointment to CHS; a presentation of his goals for alternative programs; teacher teams that would be consistent with alternative programs but would be autonomous; and the STS/QWL paradigm as a high employee involvement. The researcher took over the meeting to explain and review the agenda.

He pointed out that conflict management, the old norm, was out. Cooperation, collaboration, and teamwork was in. The STS/QWL paradigm was presented as a high employee-involvement model that empowered not only administrators but also stakeholders at all levels to do their work. In addition, the model represented a philosophy more than methods and techniques, and included issues of basic values and assumptions about management structure and people. Sharing, mutual trust and respect were paramount in the alternative model.

A draft of the new organization chart that included an explanation of the RAC centers and the LAC guidance system was distributed. Included was the empowerment of all rated administrator and supervisory persons to:

1. carry out the functions of their new responsibilities without having to pass the buck up the line to the headmaster;

2. include the power of suspension in their new positions, which brought new strength to their responsibility areas and persons.

They were informed of the following: Everyone would be operating in an open system; horizontal communications were to be emphasized as well as vertical; all communications were to indicate the originators for reference and publication; for the traditionalist, the organizational structure could be reviewed within a chain-of-command perception with AHMs in charge, or as a flatter organizational model with administrators as resources or diagnosticians; and, finally, the model and empowerment was designed for survival.

The last order of business was to review the agenda; for upper- and lower-house headmasters to meet with their RAC administrators to address their concerns; and to announce face-to-face meetings with RAC administrators to finalize assignments and accommodate for the best complementary fit of the workplace needs and the persons doing the work.

Stakeholders. On September 8, 1982, the stakeholders reported for the usual organization meeting. For many, the "overnight" change of headmasters was considered routine, in light of the constant changes taking place.

The upper-house assistant headmaster introduced the new headmaster, who restated the goals cited the previous day to the administrators. Then the researcher repeated the rationale for the new model as presented the previous day, and added: The faculty was considered to be a high-powered faculty; no one, including the headmaster, could run the school alone; it was to be a collective activity, with conflict management out and teamwork, cooperation, and collaboration in; a climate of mutual trust and respect could reclaim the school.

After his presentation, the meeting was turned over to the upper- and lower-house headmasters for meetings and agenda discussion in their respective houses preparatory to the arrival of students and implementation of the alternative model. The STS/QWL paradigm was mentioned once and not formally referred to again during the study year. Nor was the paradigm presented as another piecemeal change, but as a whole system change with commonplace, commonsense, understandable mechanisms implemented in order to survive.

Institutionalization and Diffusion of the STS/QWL Concept and Characteristic Elements

The ultimate objective of survival was to institutionalize and diffuse the alternative model, each a coproducer of the other, as effectively and efficiently as possible.

Institutionalization

Modeling and on-site stakeholder participation was crucial for institutionalization. Although financial rewards could not be offered, the basic strategy relied on to attract stakeholder acceptance was an appeal to intrinsic reward systems. These were most prevalent in teaching staff. Although most teachers subscribe in principle to intrinsic rewards, some experienced difficulty in accepting the new empowerment and the responsibility that goes with it. Others were plainly invested in being opposed to any change. These perceptions were evidenced in the face-to-face interviews.

The effort to maintain a constant modification process necessitated a mechanism to continuously assess and change. The Information, Participation, Feedback (IPF) loop, which included hermeneutic and reflective discourse, served this purpose well. Needed changes were instant and in compliance with the LAC guidance system.

Obstacles

Many obstacles or problems can be assumed to be present in any change activity. Obstacles may be anticipated or unanticipated. Some of these obstacles have been discussed in Chapter 2 and are reviewed here.

Assistant Headmasters-Administration (AHM-As), middle managers, and Assistant Headmasters-Subject (AHM-Ss), first-line supervisors, as well as numerous pre-identified stakeholders, presented a base of anticipated problems. The pre-assessments proved to be correct. In spite of mechanisms used, such as communications, modeling, behavioral examples, reinforcement, the IFP loop, and involvement through experimental activities including on-the-job training for these numerous stakeholders, results were not as productive as in other levels.

Diffusion

Institutionalization and diffusion within the standing organization was deemed to be possible at the outset. Diffusion within CHS had numerous successes. Many stakeholders welcomed and adopted the new alternative model. The longevity expected, as has been cited, was curtailed because of the contaminants.

Several mechanisms were attempted to ensure the success of the diffusion process. The most important was improving the interpersonal relations between the researcher as facilitator, the headmaster as principal intervenor, and then the invested and other stakeholders. Two-way positive communication was a critical precondition. This communication ultimately took the form of face-to-face discourse. Specific written communication was avoided.

The major problem in the diffusion process was perceived to be communication of the model because of the contaminants that created a reluctance to diffuse by giving active participation the impression of subverting central office initiatives. Communications and committee meetings in many respects were a contradiction of the central office initiatives. Lastly, many avoided the structure of questionnaires and committee meetings, all of which were clearly interpreted as manipulative by an educated stakeholder cohort.

Although communications was identified as an important characteristic and label in the diffusion and institutionalization of the alternative model (RAC and LAC) and satisfactorily evidenced by many stakeholders, it clearly was evidenced to many stakeholders; however, not sufficiently to the researcher's satisfaction.

Communications, modeling, and on-the-job training attempted at administrator meetings through an informal system of rotating chairpersons was implemented. Its effectiveness in diffusion was dubious. Conversely, nonadministrative stakeholders performing in roles involving management-level tasks proved to be successful.

Perhaps the more identifiable communications that took place were the numerous face-to-face "conflict" resolutions utilizing the hermeneutic and reflective critical discourse mechanisms. This mechanism reinforced the researcher's and headmaster's credibility constantly and provided effective modeling examples. It also demonstrated and taught the problem finder the importance of understanding the complexity of the organization and the nature of its stakeholders and their roles as well.

Dissemination

The purpose of this research was to identify and define those STS/QWL characteristic elements presumed to improve the quality of working life for the CHS staff.

From the research literature, the reflections and notes of the case study years, and the follow-up interviews, the STS/QWL characteristics offered in the concept as applied to the case study were supported by the follow-up interviews. It would be helpful for any individual who may be charged with initiating or guiding an STS/QWL to understand what problems are involved in such a change attempt. The researcher's perception is that the urban secondary school can respond favorably to an STS/QWL paradigm. The approaches and designs must vary as they are generated and created by the school inhabitants. What is abundantly clear is that the STS/QWL approach must be a genuine and sincere initiative that offers all of the STS/QWL characteristic elements. These are discussed at length in Chapter 5.

Analysis

In order to construct academic integrity and ensure defensibility, independent services were secured to accomplish the following: (1) transcription of the taped interviews, Cabot Business Services, Inc., Beverly, Massachusetts; (2) analysis of interview transcriptions, Educational Program Analysis-Consultants, Boston, Massachusetts; and (3) transcription of interview graphics and statistics, Advanced Professional Technologies, Inc., Islington, Massachusetts.

Several informational and educational sessions were provided for the transcriber, the interview analyst, and the graphics analyst in order to acquaint them with the STS/QWL paradigm concept and its characteristic elements. The interview analyst was presented with the study proposal, and participated in numerous telecommunications and face-to-face dialogues.

Dialogue included (1) review of subject matter; (2) hermeneutic intersubjective interpretation of the many complexities of the study purposes; and (3) reflective critical discourse in understanding the frames of reference of the interviewees as they applied to the study questions. In this way, the study will "unite an interest in nomelogical and interpretive knowledge aimed at facilitating the process of self-reflection" (Held, 1980, p. 296).

Study and analysts' interview analyses were compared upon completion. The interpretation of one question was modified.

A two-dimensional framework was established to resolve variances between the study conducted and the independent interview analysts' data

analysis. First, changes would be accepted on a consensual basis. Second, lacking consensus, the analysts' findings would prevail.

Data analysis was mapped out on standardized grid sheets listing each interviewee's code name and number, headed by the STS/QWL characteristic elements, study/question specifics, and interpretive headings as understood and applicable.

Thirty-six faculty and staff members of CHS who participated in and/or observed the implementation stage of the program study period of 1982-1983 were formally interviewed. The transcriptions of these tape-recorded conversations were submitted to an analysis of respondents' answers to and attitudes toward a series of ten STS/QWL components, which ranged from the importance of shared power and decision-making among faculty and administration through the perception of participants towards the general organizational tone and structure. Participants were asked to respond to a number of questions about leadership style and to present their own perceptions about the effectiveness of change efforts and sense of personal commitment and participation.

In addition to the thirty-two responses to the ten common constructs or descriptors applied to each question which are included in this study (four of the responses were used as trial interviews, and are not included in data analysis), each question was analyzed by an additional series of descriptions, specific to that response.

The result of this process is the definition of certain elements that define desirable improvements in the urban secondary school situation as well as those constructs, practices, or organizational situations that either encouraged, opposed, or were indifferent to the change

process attempted in 1982-1983 at CHS. Contaminants and obstacles to the implementation of the STS/QWL paradigm are also determined.

In Question 1, participants were asked to identify and define those STS/QWL or commonsense elements, approaches, and/or conditions which would characterize a model for secondary urban school management that would enhance the improvement of the quality of working life in that environment for the stakeholders. The STS/QWL Characteristic Elements Identified and Defined in Question 1 are shown in Figure 4.3.

The most overwhelming positive response indicated by the respondents was the necessity for the sharing of power and decision-making processes among the stakeholders in any program development or implementation. This endorsement also included the almost universal recognition that human values and the need for participation must be regarded and respected if success is to be anticipated. Participants must perceive the organization in which they operate and in which they are stakeholders to be open, supportive, and conducive to change, and that they, in fact, have a sense of control over their own destinies and the future direction of their organization. Of those not enthusiastic of the shared power concept, a small minority cited the need for a "person in charge" or a "benevolent dictator" for actual implementation and responsibility.

Almost all of those responding to the questions about the pilot year of the introduction of the STS/QWL paradigm at CHS recognized the existence of obstacles and/or contaminants that either hampered or obstructed program implementation. Stakeholders Recognizing the Existence of Obstacles are shown in Figure 4.4. Stakeholders Recognizing the Existence of Contaminants are shown in Figure 4.5. Some

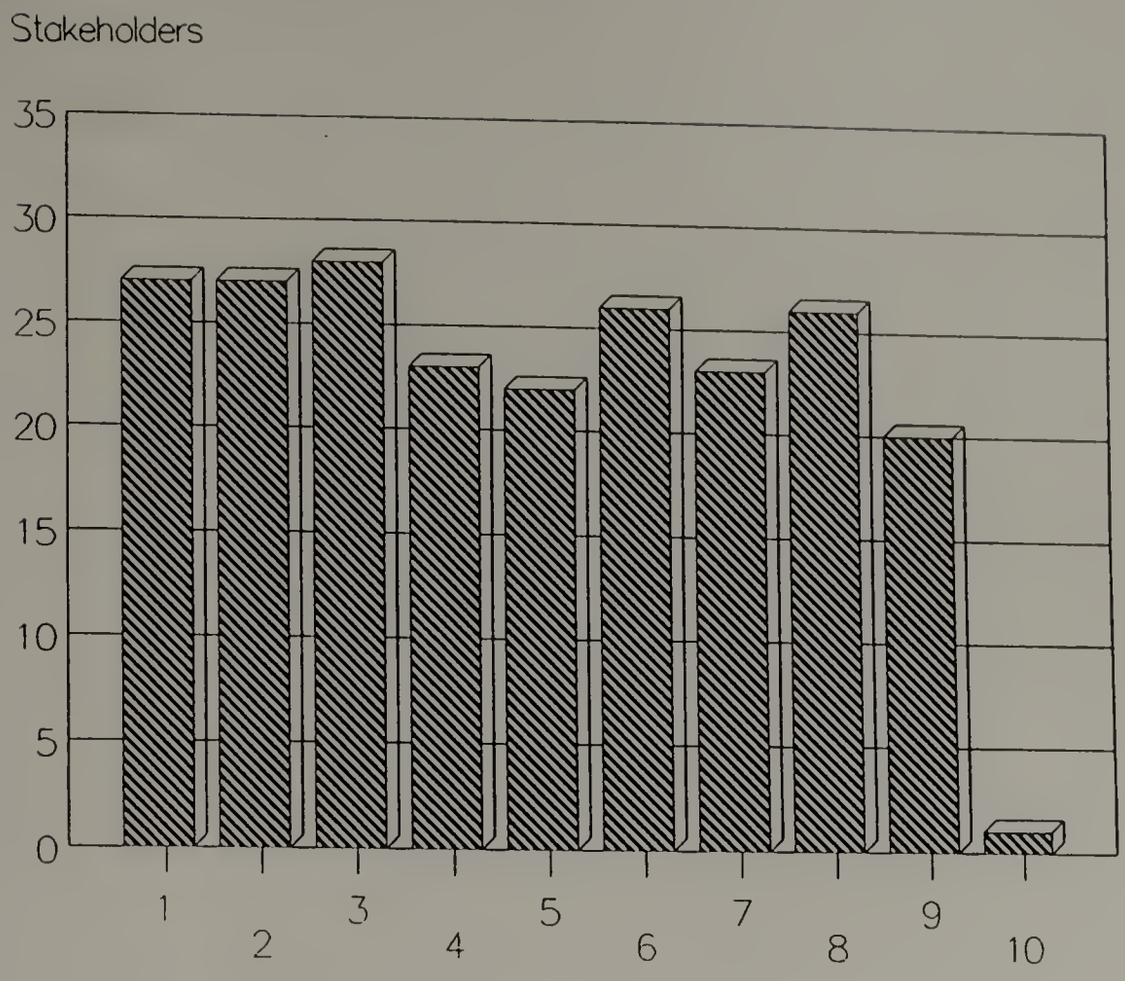


Figure 4.3. The STS/QWL characteristic elements identified and defined in Question 1.

INTERVIEW ELEMENTS:

1. Shared power
2. Human values
3. Human resources developed
4. Organizational philosophy adaptive and flexible
5. Worker control
6. System open to participation and change
7. Cooperation and collaboration
8. Influence and respect in the larger society
9. Commitment and ownership
10. Innovation and risk-taking

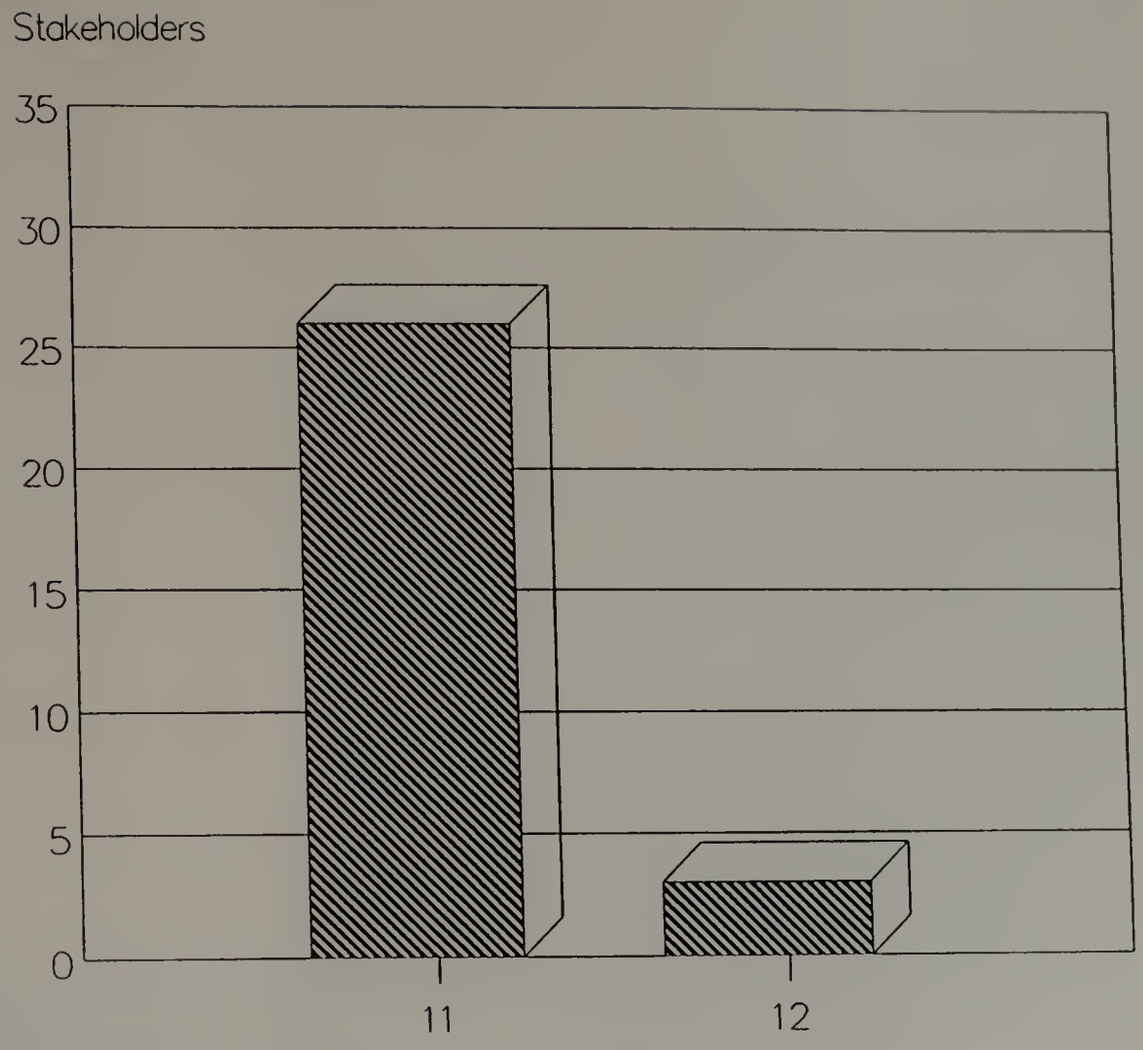


Figure 4.4. Stakeholders recognizing the existence of obstacles.

INTERVIEW ELEMENTS:

11. Recognized obstacles
12. Did not recognize obstacles

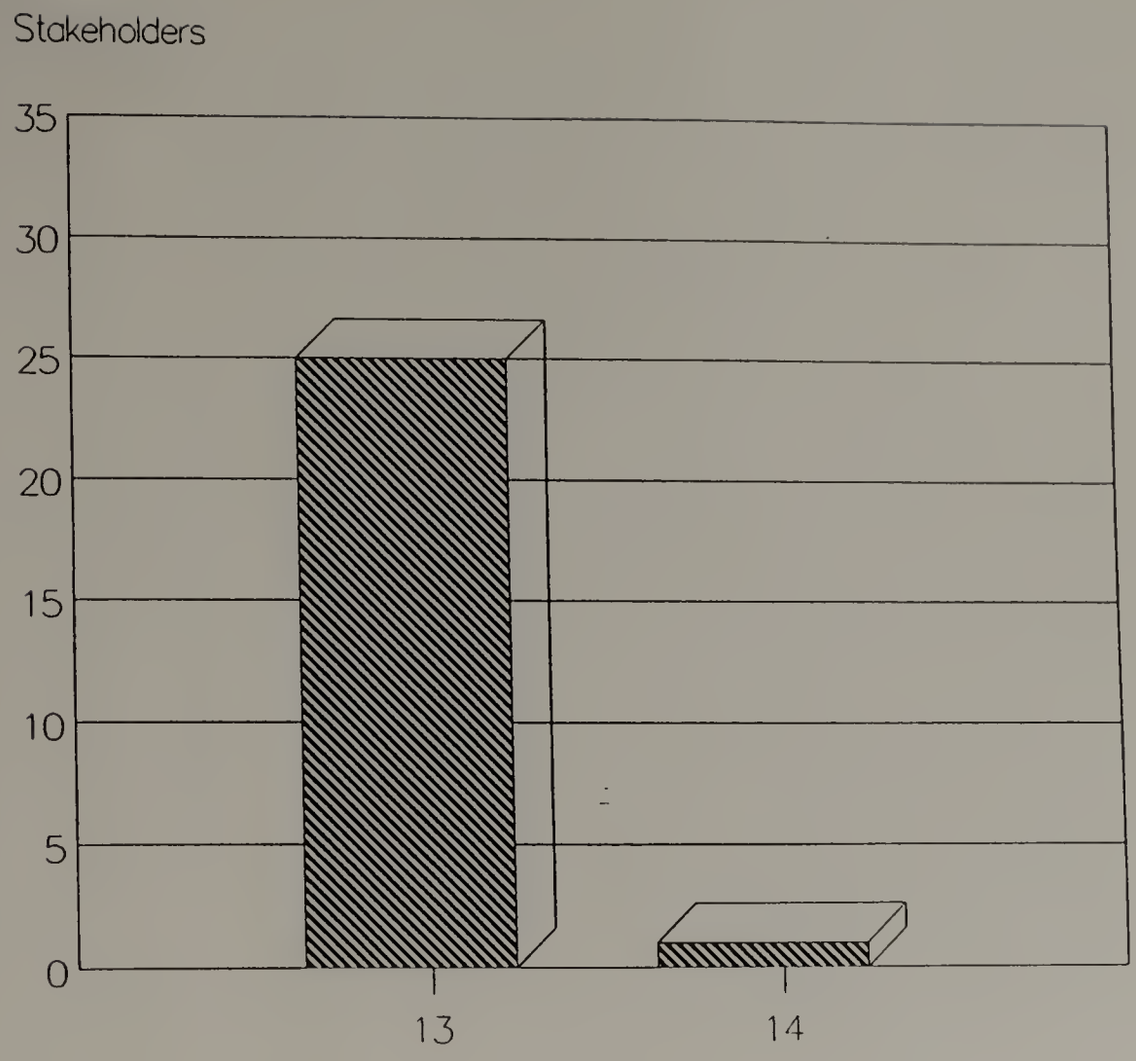


Figure 4.5. Stakeholders recognizing the existence of contaminants.

INTERVIEW ELEMENTS:

13. Recognized contaminants
14. Did not recognize contaminants

of these were controllable, some not. Stakeholders' Perception of Obstacles/Contaminants (Controllable, Uncontrollable, and Principal Contaminant) are shown in Figure 4.6. Some were the result of internal conditions, concepts, or practices at CHS, and some were the result of forces outside the internal operation of the school or the result of larger societal pressures.

Slightly over half of the respondents felt that the paradigm or model was not effectively communicated to or understood by the entire faculty, although a larger percentage felt that they themselves had an adequate perception of its intents and purposes.

Faculty resistance to the paradigm was cited as a major problem by half of the participants. This resistance was attributed to many cases, including basic mistrust of any change effort and a general numbness caused by the pressures and turmoil of the desegregation process. The fact that it was perceived by many as a central office initiative, imposed on a school that was too large and that contained a state-regulated student population was also cited as a hindrance to program goal achievement. The school committee was also identified as an inhibiting factor.

Of the twenty-five respondents who indicated that they recognized and understood the model, fifteen said it worked. Six felt that it was successful in some or most areas, and four, for various reasons, felt it was not successful. An overwhelming majority felt the paradigm showed promise and should be pursued. Stakeholders' Recognition and Perception of the Alternative Model is shown in Figure 4.7.

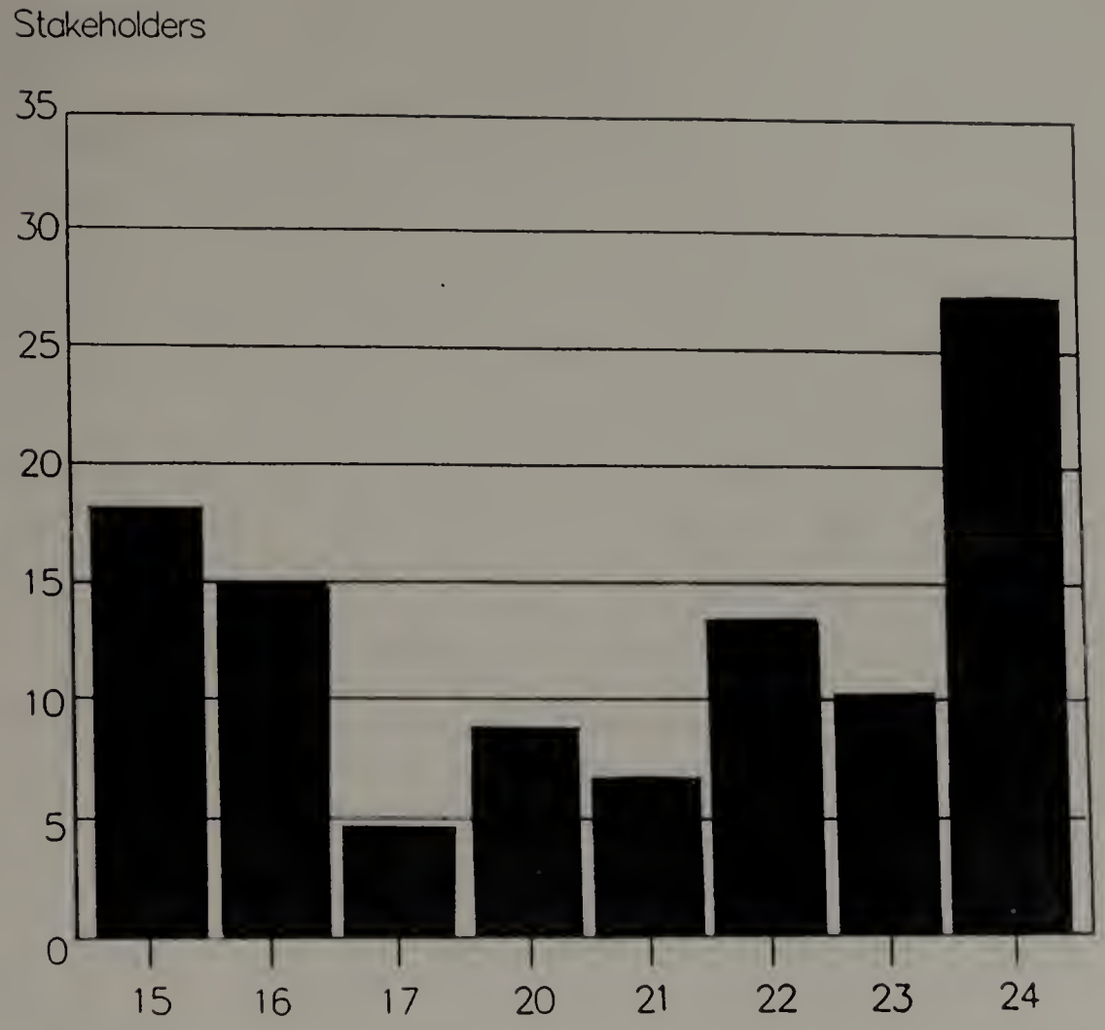


Figure 4.6. Stakeholders' perception of obstacles/contaminants (controllable, uncontrollable, and principal contaminant).

INTERVIEW ELEMENTS:

Controllable
15. Models' communication
16. Faculty resistance
17. Excessive noninstructional duties

Uncontrollable
20. Central office initiatives
21. State-regulated population
22. Building size

Principal Contaminant
24. Central office initiatives

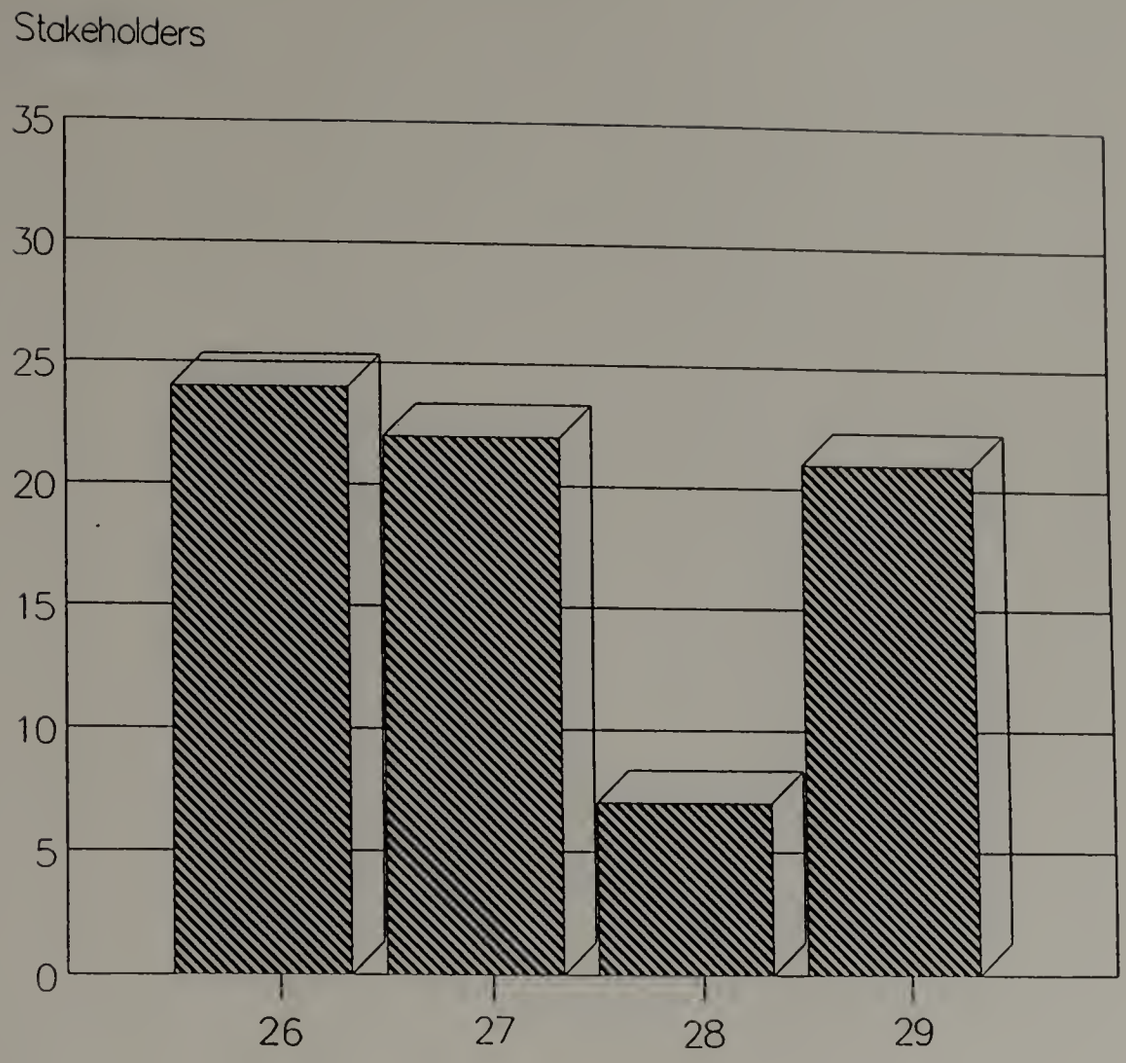


Figure 4.7. Stakeholders' recognition and perception of the alternative model.

INTERVIEW ELEMENTS:

26. Recognized the alternative model.
27. The model worked.
    Successful in most areas (included in 27).
28. The model did not work.
29. The model showed promise.

In attempting to answer one of the most important questions posed by this study, an attempt was made to determine what causes or situations existed in 1982-1983 which impeded or, in some cases, precluded full participation in and adoption of the STS/QWL paradigm. Stakeholder Perceptions of Impediments which Precluded Full Participation in and Adoption of the STS/QWL Paradigm are shown in Figure 4.8.

While most interviewees endorsed the concept of shared power and decision-making functions through self-regulating autonomous teams, twenty-one also felt that more faculty control and effective participation were desirable in the actual implementation as demonstrated in 1982. There was a general satisfaction with the actual program and its personnel, but many felt it was hampered by a lack of support either from the administration of CHS or from the central office of the Boston Public School System.

This perception was characterized by participants' responses indicating a lack of faith in the stability of the administrative structure at that time. Many believed the headmaster to be in an "acting" or "holding" position until more permanent arrangements could be made, and were thus reluctant to participate in or commit to a transitory change effort which might be either obstructed or totally disregarded by a new, more permanent administration.

This perception was supported by the introduction of competing programs within the school which confused many faculty about administrative intentions and priorities. This confusion was increased when no forceful direction was forthcoming from the school's administration or central office personnel.

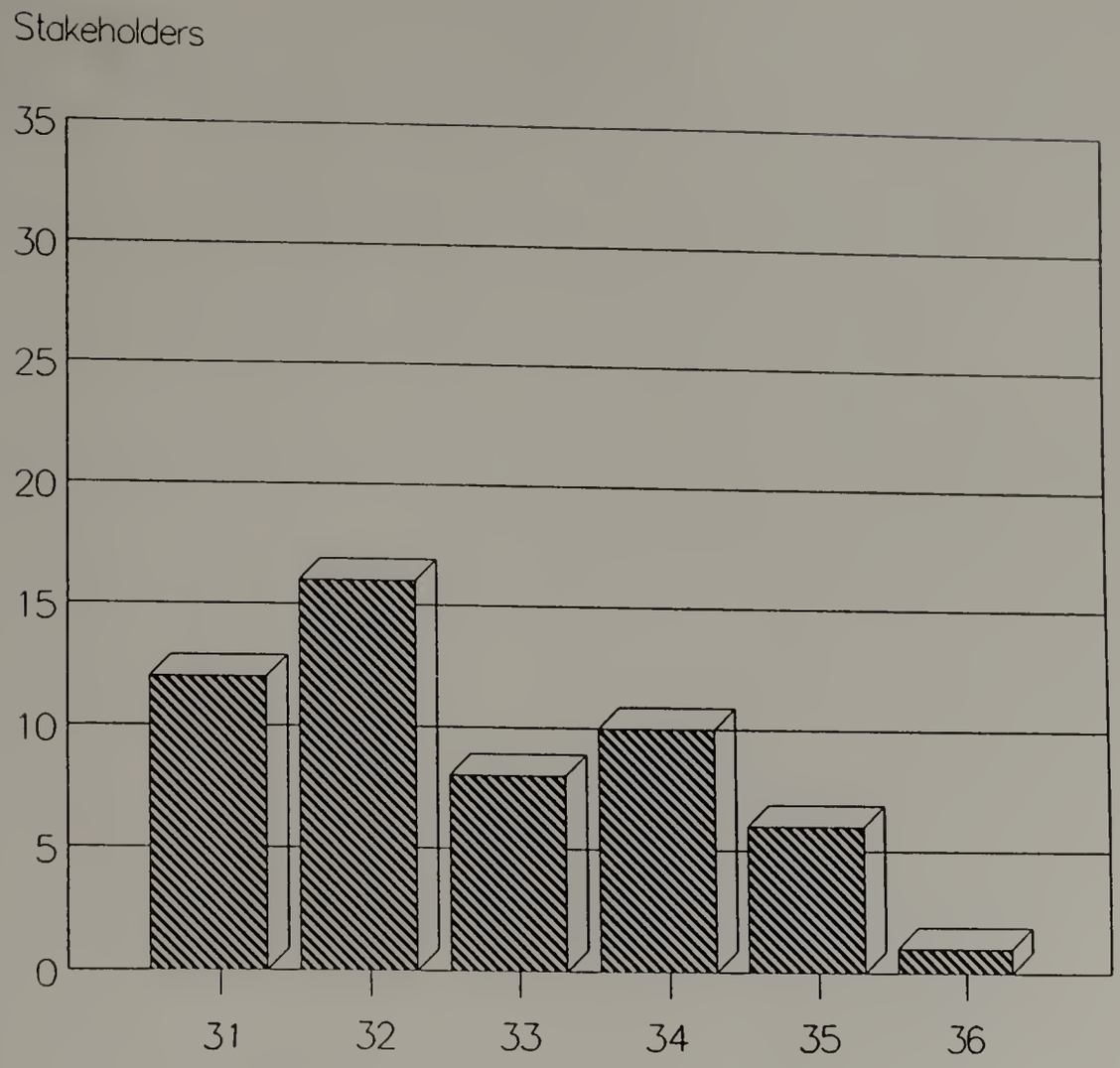


Figure 4.8. Stakeholder perceptions of impediments which precluded full participation in and adoption of the STS/QWL paradigm.

INTERVIEW ELEMENTS:

31. More faculty control and effective participation needed
32. General satisfaction with the program and its personnel
33. Completing programs within CHS
34. Lack of confidence in CHS administration or central office
35. Lack of stability in CHS administrative structure
36. Lack of forceful direction from CHS central office personnel

A general reticence to participate in or commit to specific programs during this period may be attributable to the sense of frustration and powerlessness which many, if not most, participants expressed. There was a great deal of energy at the time to "do something," and the consensus seems to indicate that the STS/QWL paradigm offered an excellent opportunity to funnel and direct that energy into constructive activities.

Question 2 attempts to further define and isolate those elements, conditions, and qualities that either encouraged or obstructed the implementation of the STS/QWL paradigm at CHS. The STS/QWL Characteristic Elements Further Defined and Isolated are shown in Figure 4.9. Only three of the interviewees were generally negative or opposed to program goals and objectives.

The majority expressed support and, in most cases, enthusiastic endorsement of the model. Approval of Program Goals and Objectives Toward Conversion of Conflict to Collaboration is shown in Table 4.10.

Question 2 focuses on the need for shared power and organizational structures conducive to an open system approach and individual self-actualization in that process. The Reasons Contributing Toward Conversion of Conflict to Collaboration and Cooperation are shown in Figure 4.11. "Openness" and a general sense of trust and respect as demonstrated in reflective and critical discourse and the delegation and sharing of power were deemed as highly desirable qualities. They were also perceived by most respondents to be evident in the design and implementation of the paradigm. Most respondents indicated satisfaction with the program goal's direction and implementation, while some were

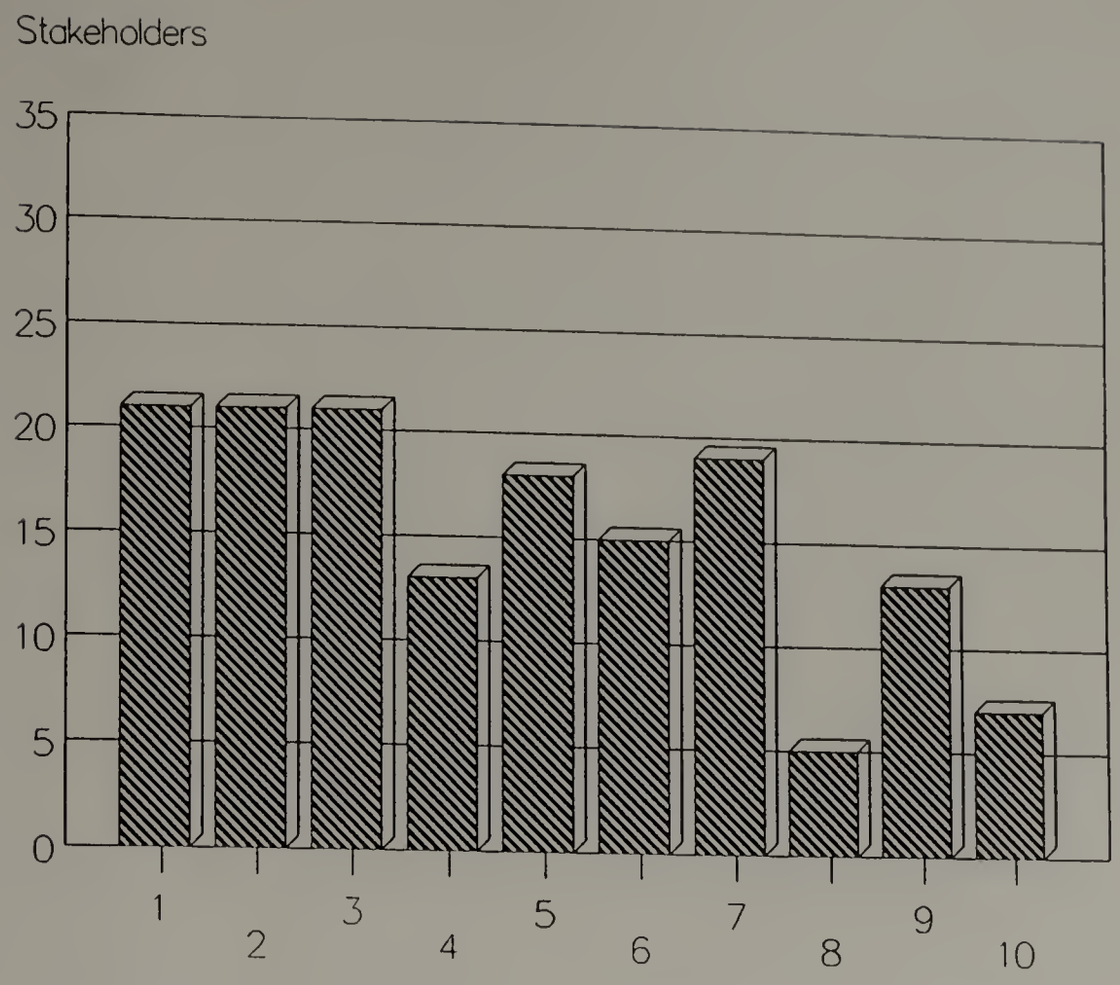


Figure 4.9. The STS/QWL characteristic elements further defined and isolated.

INTERVIEW ELEMENTS:

1. Shared power
2. Human values
3. Human resources developed
4. Organizational philosophy adaptive and flexible
5. Worker control
6. System open to participation and change
7. Cooperation and collaboration
8. Influence and respect in the larger society
9. Commitment and ownership
10. Innovation and risk-taking

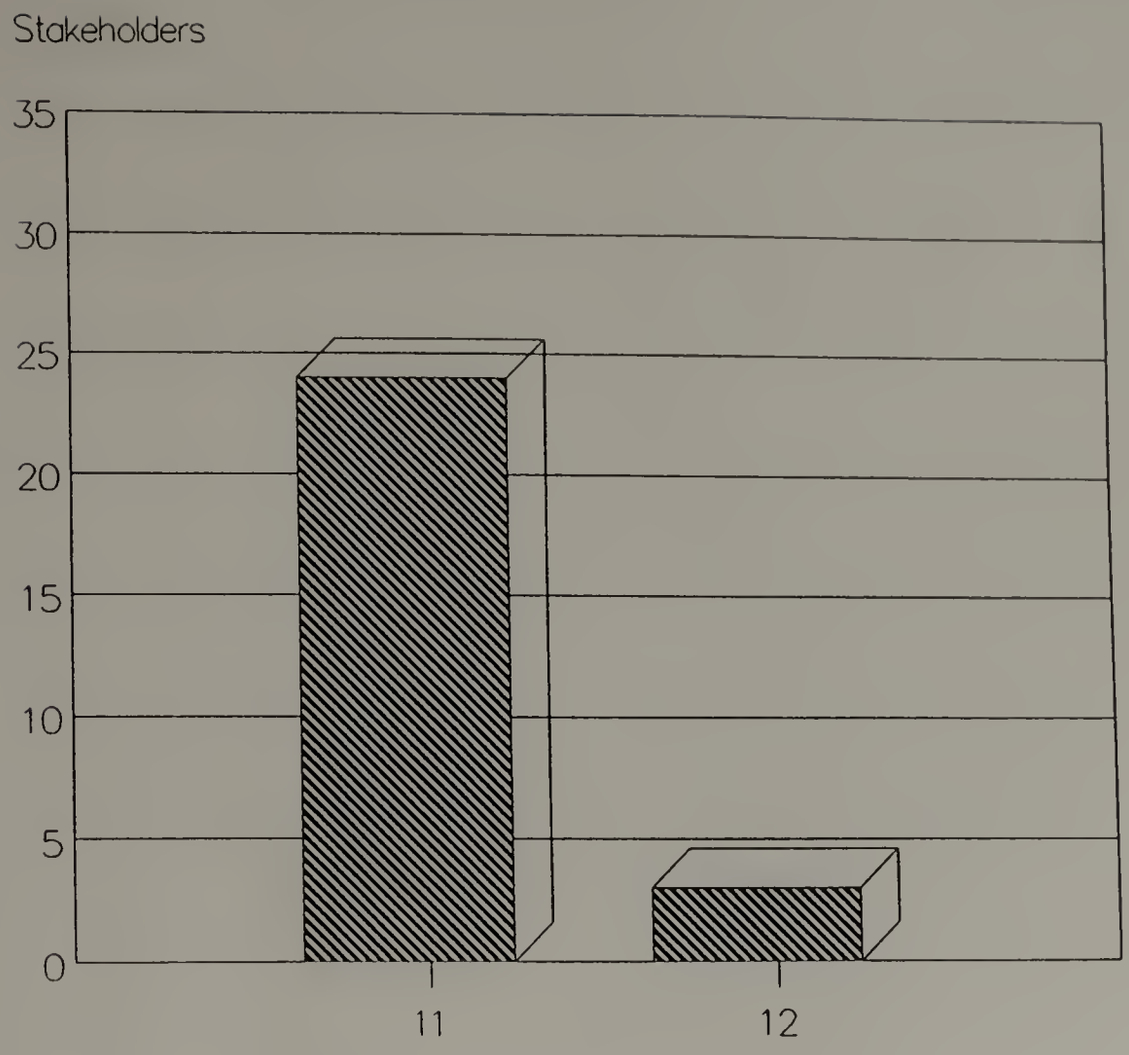


Figure 4.10. Approval of program goals and objectives toward conversion of conflict to collaboration.

INTERVIEW ELEMENTS:

11. Positive
12. Negative

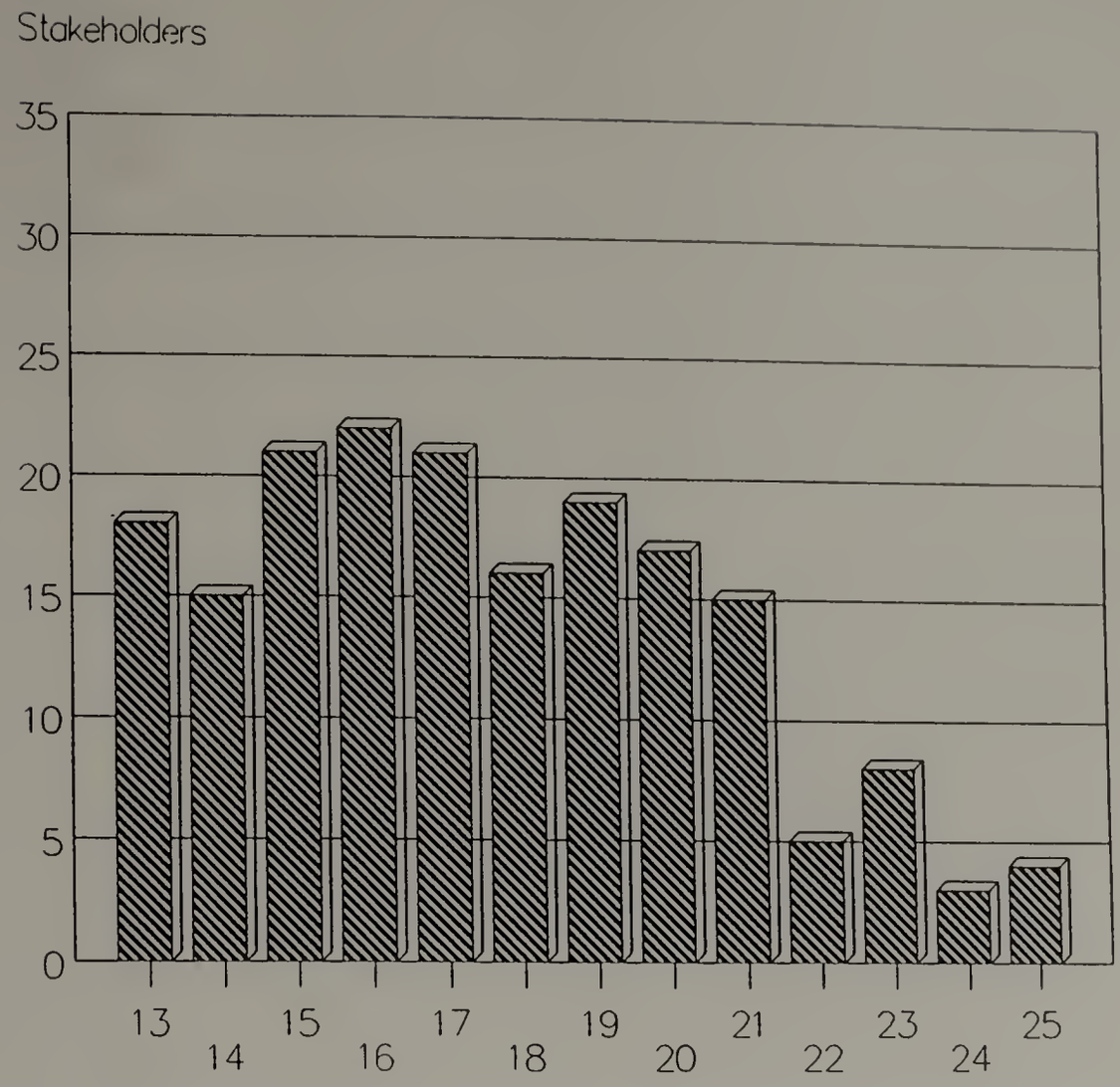


Figure 4.11. The reasons contributing toward conversion of conflict to collaboration and cooperation.

INTERVIEW ELEMENTS:

13. Reflective and critical discourse
14. Delegation and sharing of power
15. "Openness"
16. Trust and respect
17. Satisfaction
18. Task ownership
19. Negotiated settlement
20. Conflict resolution
21. Model-task oriented
22. Administration in general
23. Program Director's personality
24. Noninterference--outsiders
25. No recollection

disappointed that a variety of factors impeded its full adoption at the school.

Respondents indicated that they felt a sense of participation which was supported by the encouragement of responsibility and task ownership through negotiated settlement and conflict resolution. The task orientation of the model directed efforts toward achievement of discernible goals and conditions and promoted the effectiveness of program implementation.

The role of personalities was also mentioned as both an impelling and impeding factor towards program adoption and institutionalization. Of those who expressed an opinion, most felt that the researcher exerted a positive influence on the acceptance of faculty of the paradigm, while many felt the administration in general was either neutral or negative in its influence.

Question 3 identifies respondents' perceptions of satisfaction with educational leadership exercised at the governance levels of school committee, superintendent, and district superintendents, as well as the union and/or administrators; organizations, parent groups, business and college collaborations, and teachers themselves. Sources of Effective Leadership are shown in Figure 4.12.

An almost mirror image exists between the overwhelming perception of the negative influence perceived by the respondents as being exercised by the school committee and the equally positive perception of the leadership role exercised by the teachers' union in the general effort towards school improvement.

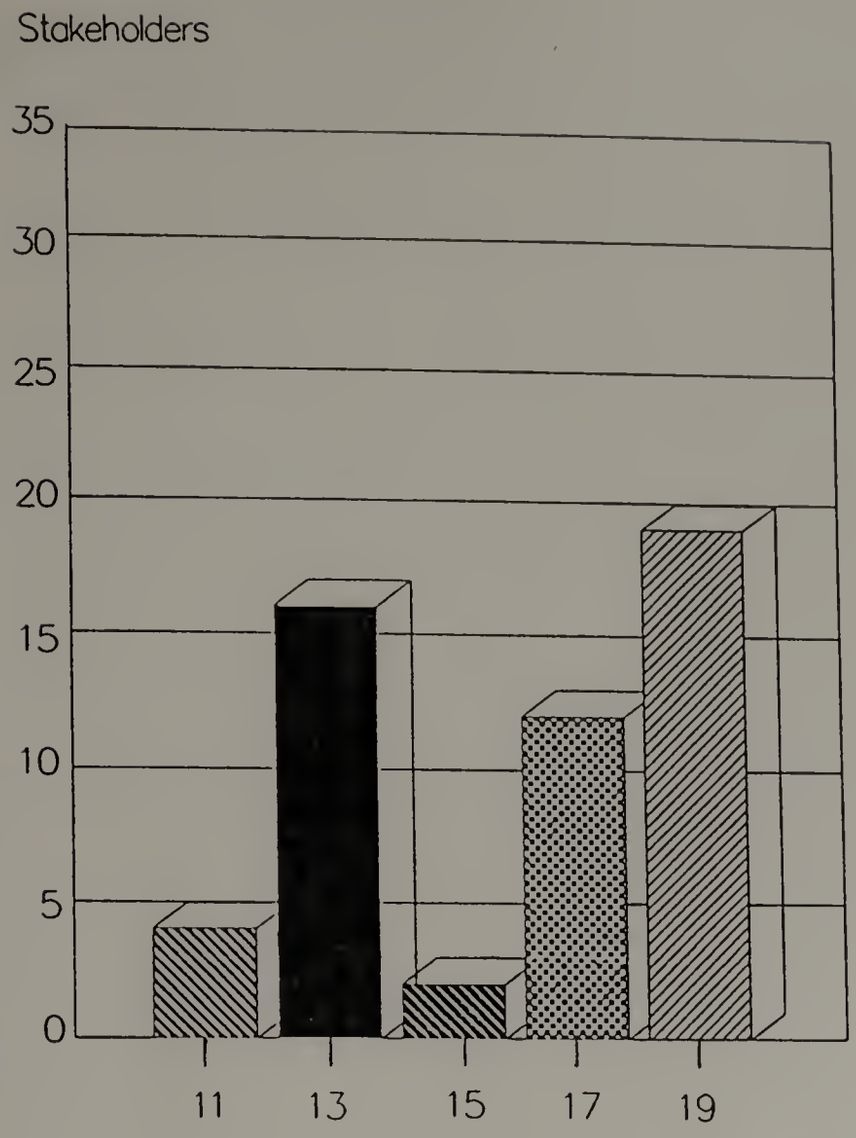


Figure 4.12. Sources of effective leadership.

INTERVIEW ELEMENTS:

11. Policy and governance level
13. Teachers union (BTU)
15. Parents
17. Business and college collaboratives
19. Teachers

Parents' groups were almost totally deemed either ineffective or nonexistent except for a few respondents involved in specific alternative or special programs. This was felt to be a general condition at the secondary level and one which should be addressed in the future as an untapped resource to achieve systematic change.

Business and college pairings were perceived as being generally effective and supportive although some respondents expressed skepticism as to the commitment and motivation of these institutions. The high visibility effectiveness of the John Hancock pairing was often mentioned as a successful relationship for students and faculty.

Leadership as exercised by teachers themselves was generally viewed as a positive light although at least eight respondents indicated that faculty laziness, inertia, and indifference were significant impediments to the introduction of any change effort at CHS.

Question 4 focuses more exclusively on the perceived leadership exercised by the administration of CHS during the program's implementation. The STS/QWL Characteristic Elements Further Defined and Isolated are pictured in Figure 4.13. Responses regarding the headmaster, administrative assistant, and assistant headmasters, as well as department heads and housemasters, were elicited from stakeholders and others placed in administrative assignment leadership positions. General Satisfaction with the School's Administrative Leadership is shown in Figure 4.14.

Two-thirds of the respondents indicated a general satisfaction with the internal leadership exercised by the above groups. Seven participants had negative views, while five expressed mixed opinions. Negative

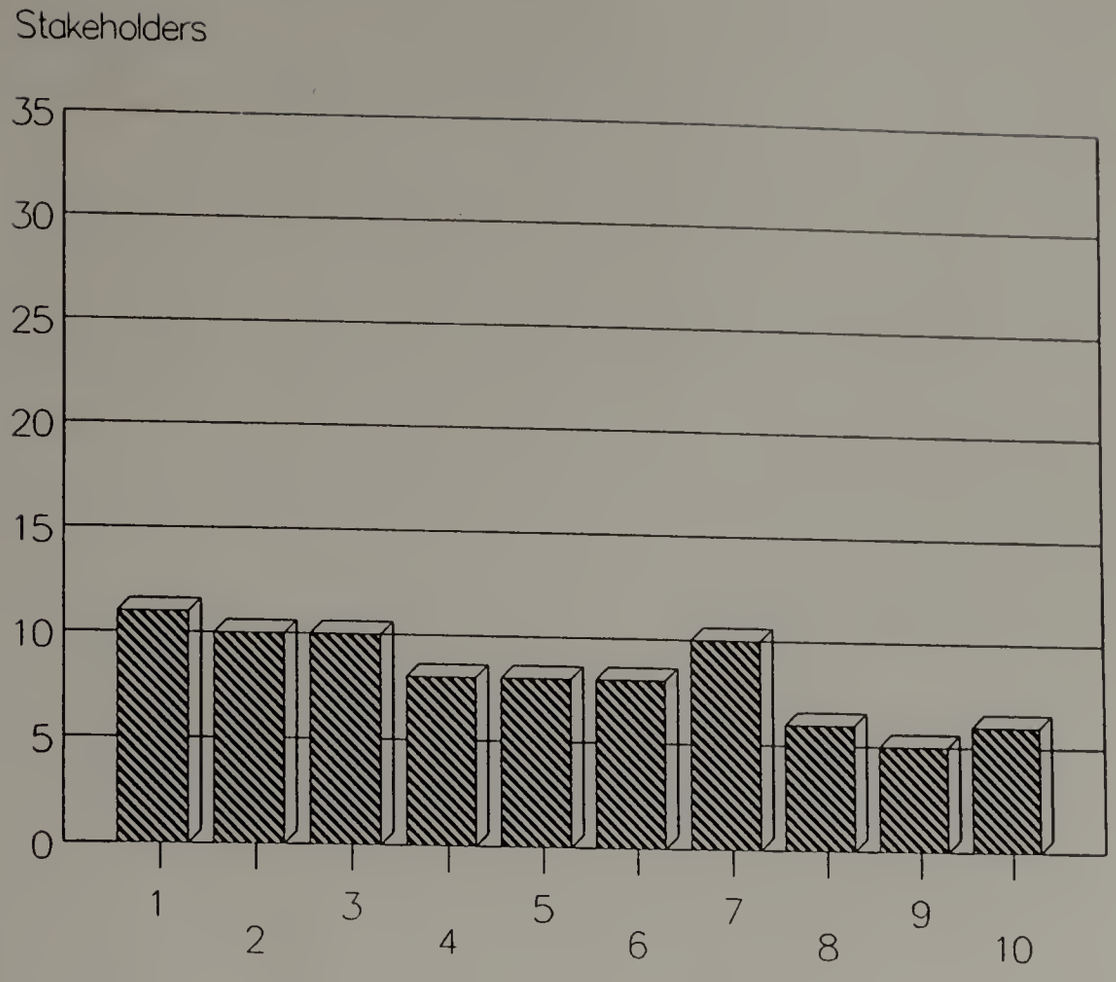


Figure 4.13. The STS/QWL characteristic elements further defined and isolated.

INTERVIEW ELEMENTS:

1. Shared power
2. Human values
3. Human resources developed
4. Organizational philosophy adaptive and flexible
5. Worker control
6. System open to participation and change
7. Cooperation and collaboration
8. Influence and respect in the larger society
9. Commitment and ownership
10. Innovation and risk-taking

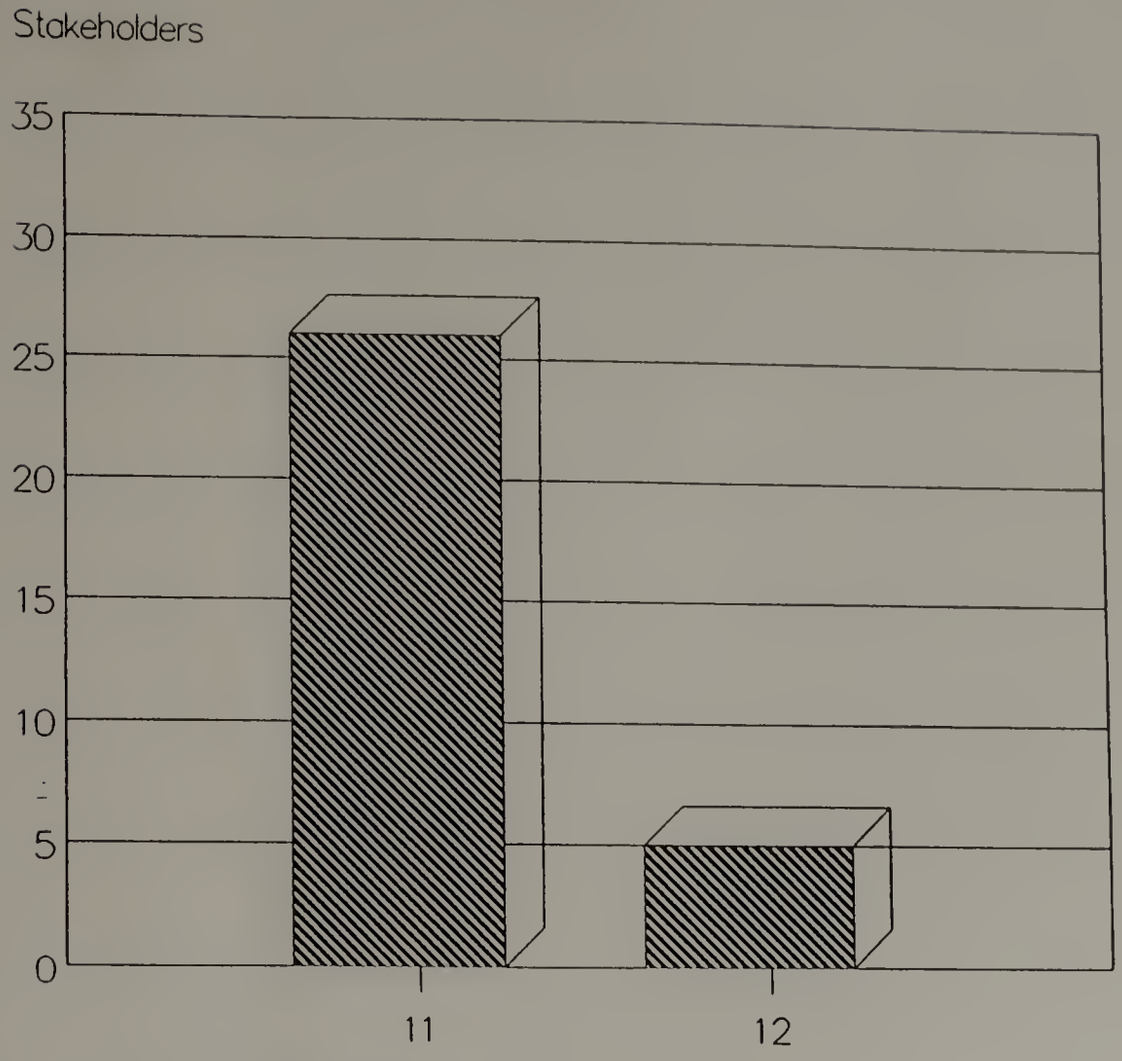


Figure 4.14. General satisfaction with the school's administrative leadership.

INTERVIEW ELEMENTS:

11. Satisfied
12. Not satisfied

Perceptions of Satisfaction with the School's Administrative Leadership are shown in Figure 4.15.

Many (one-third) indicated that various administrators were not aggressive enough in their support for any change effort and for the STS/QWL paradigm in particular. This passivity was perceived as either indifference or, in some cases, veiled opposition to program goals--primarily, the implications it entailed for power-sharing and a more open decision-making process.

A lack of understanding among administrators of the program goals and implications contributed to the problems encountered in program implementation. Some also cited a lack of teacher initiative as a contributing negative force, partially attributable to the demands on teachers' time made by noninstructional tasks.

Question 5 asked participants to characterize the staff structure in terms of its effectiveness and to comment on how they perceived themselves as effective change agents. The STS/QWL Characteristic Elements Further Defined and Isolated are shown in Figure 4.16.

Twenty respondents believed the staff structure to be effective. Eight felt it to be ineffective, and the remainder had mixed feelings. All except two of the respondents viewed themselves positively. Stakeholder Perception of Colleague (Figure 4.17) and Stakeholder Perception of Self (Figure 4.18) are presented.

Mixed support in both areas was attributed to the amount of time required of teachers in noninstructional activities and duties as well as the lack of proactive and supportive feedback from administration. Teachers expressed a sense of community and identity among themselves,

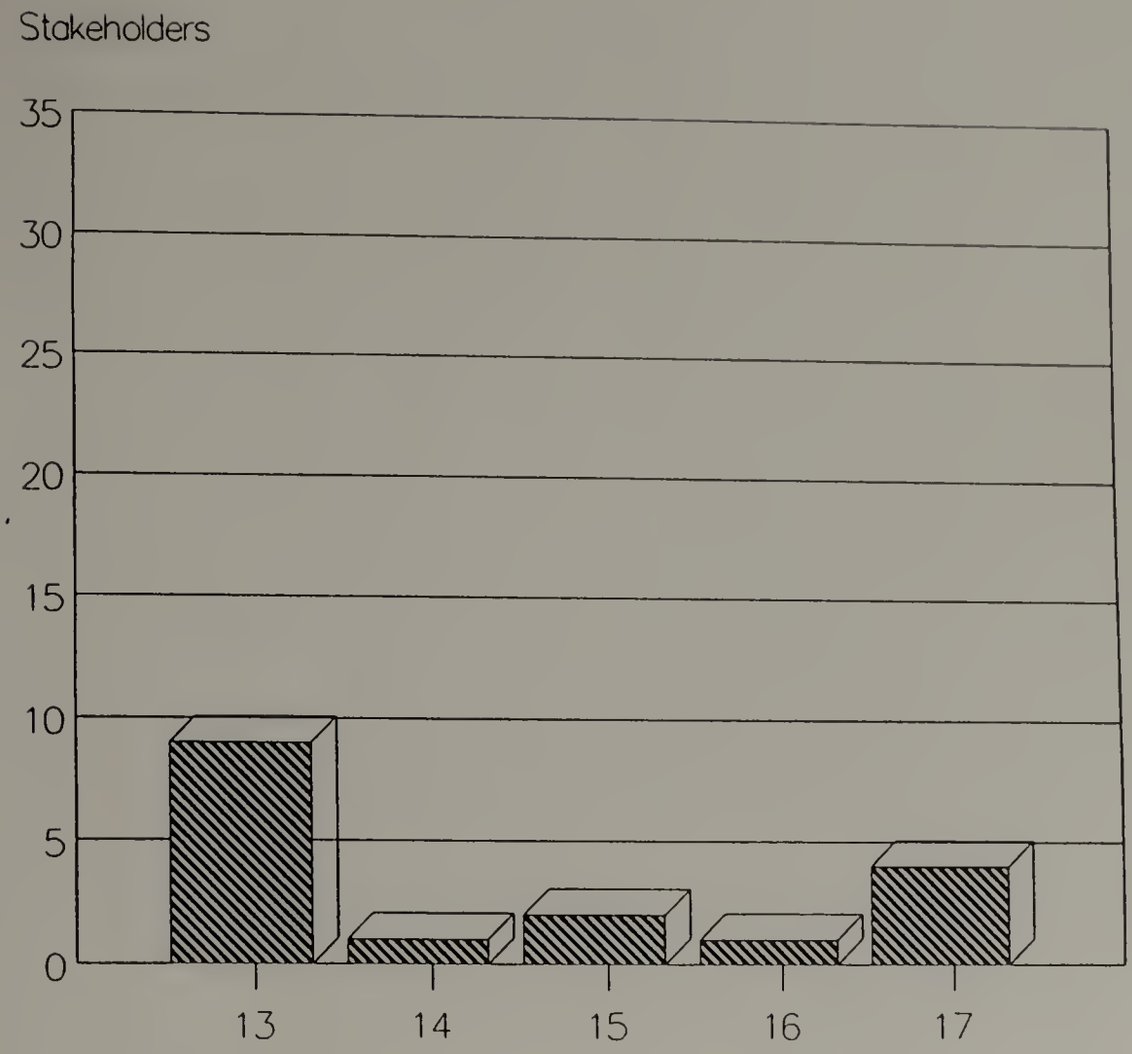


Figure 4.15. Negative perceptions of satisfaction with the school's administrative leadership.

INTERVIEW ELEMENTS:

Reason for Negative Responses:
13. Administrator not aggressive enough
14. Excessive time on noninstructional tasks
15. Project director expected to do too much
16. Lack of teacher initiative
17. Lack of understanding of the model

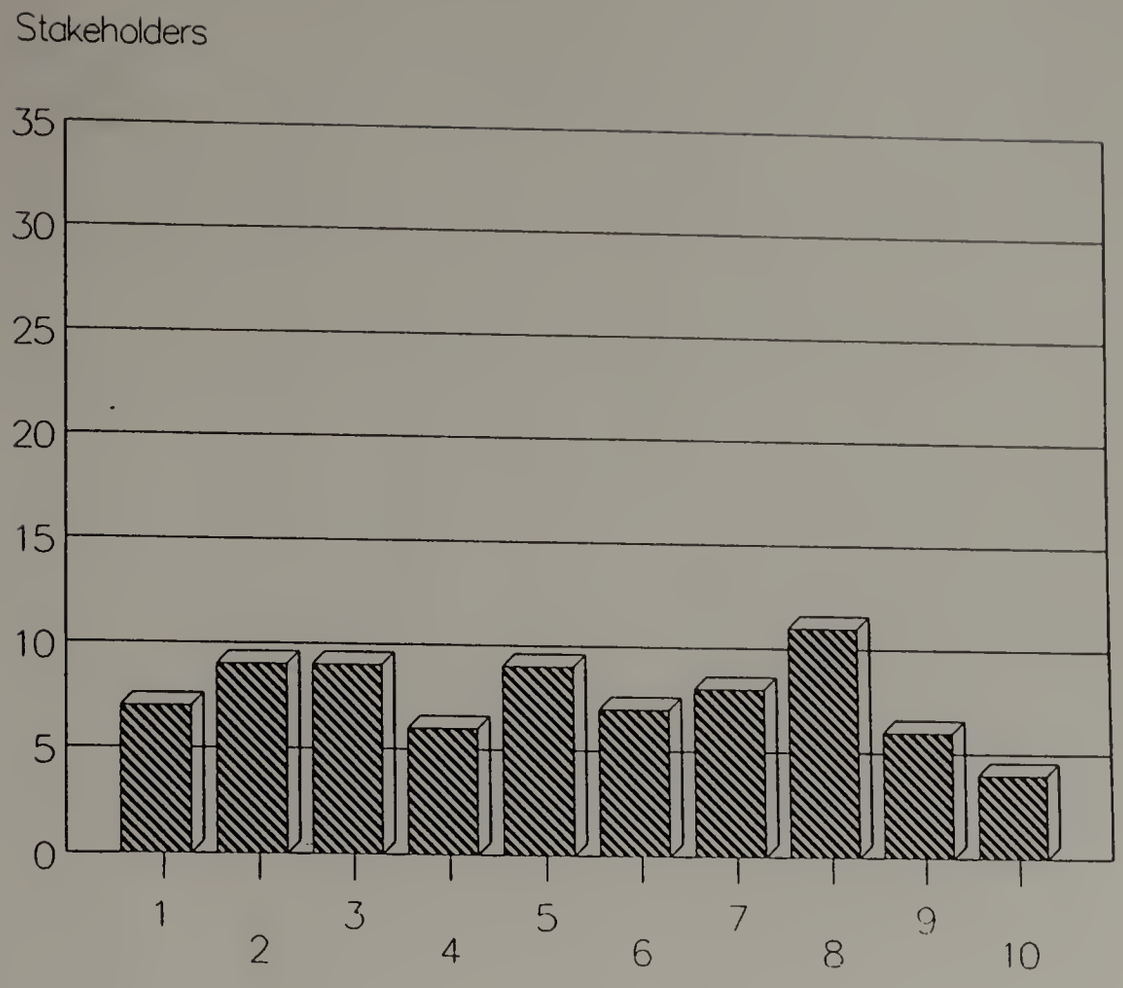


Figure 4.16. The STS/QWL characteristic elements further defined and isolated.

INTERVIEW ELEMENTS:

1. Shared power
2. Human value
3. Human resources developed
4. Organizational philosophy adaptive and flexible
5. Worker control
6. System open to participation and change
7. Cooperation and collaboration
8. Influence and respect in the larger society
9. Commitment and ownership
10. Innovation and risk-taking

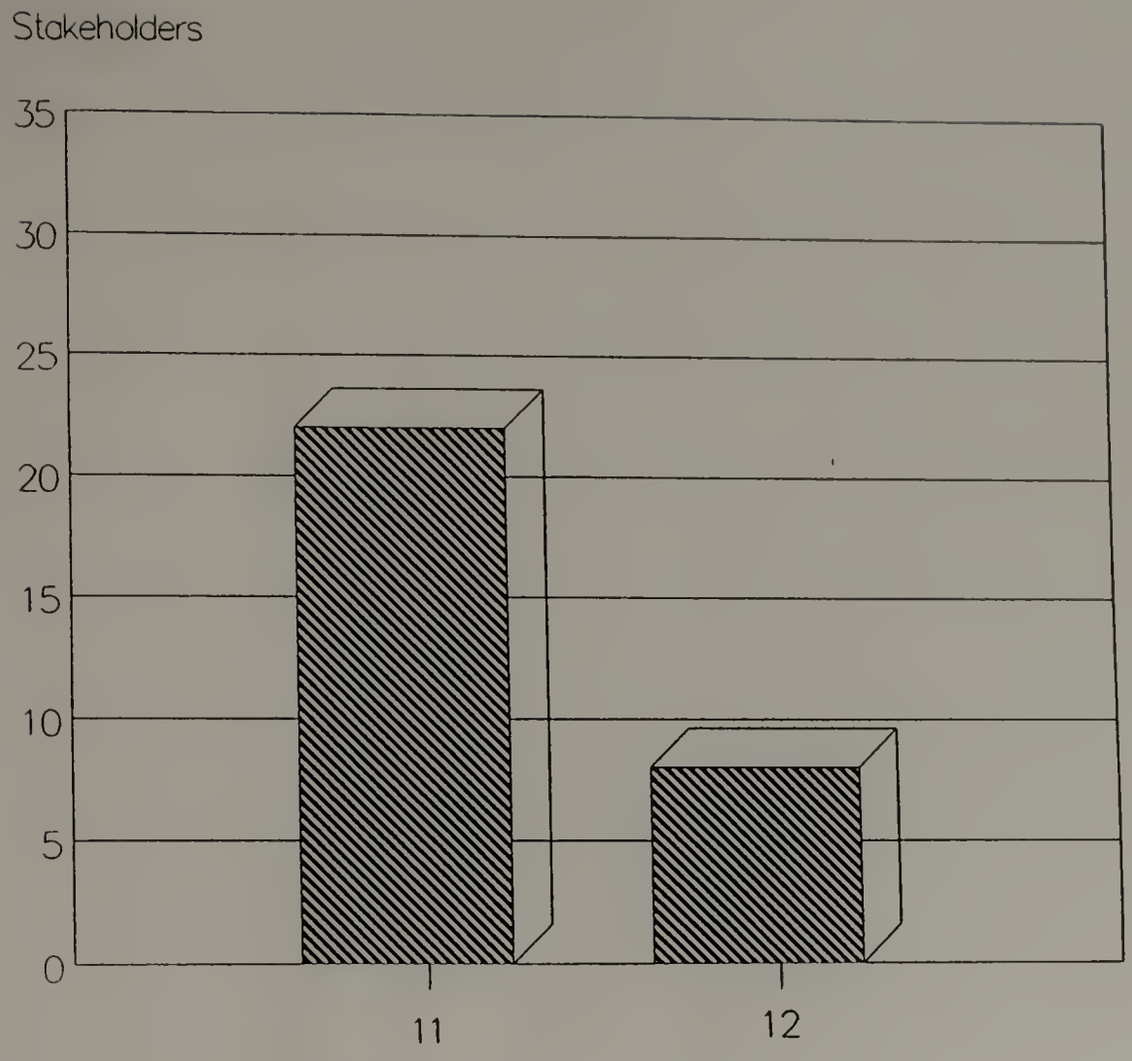


Figure 4.17. Stakeholder perception of colleague.

INTERVIEW ELEMENTS:

11. Effective as change agents
12. Not effective as change agents

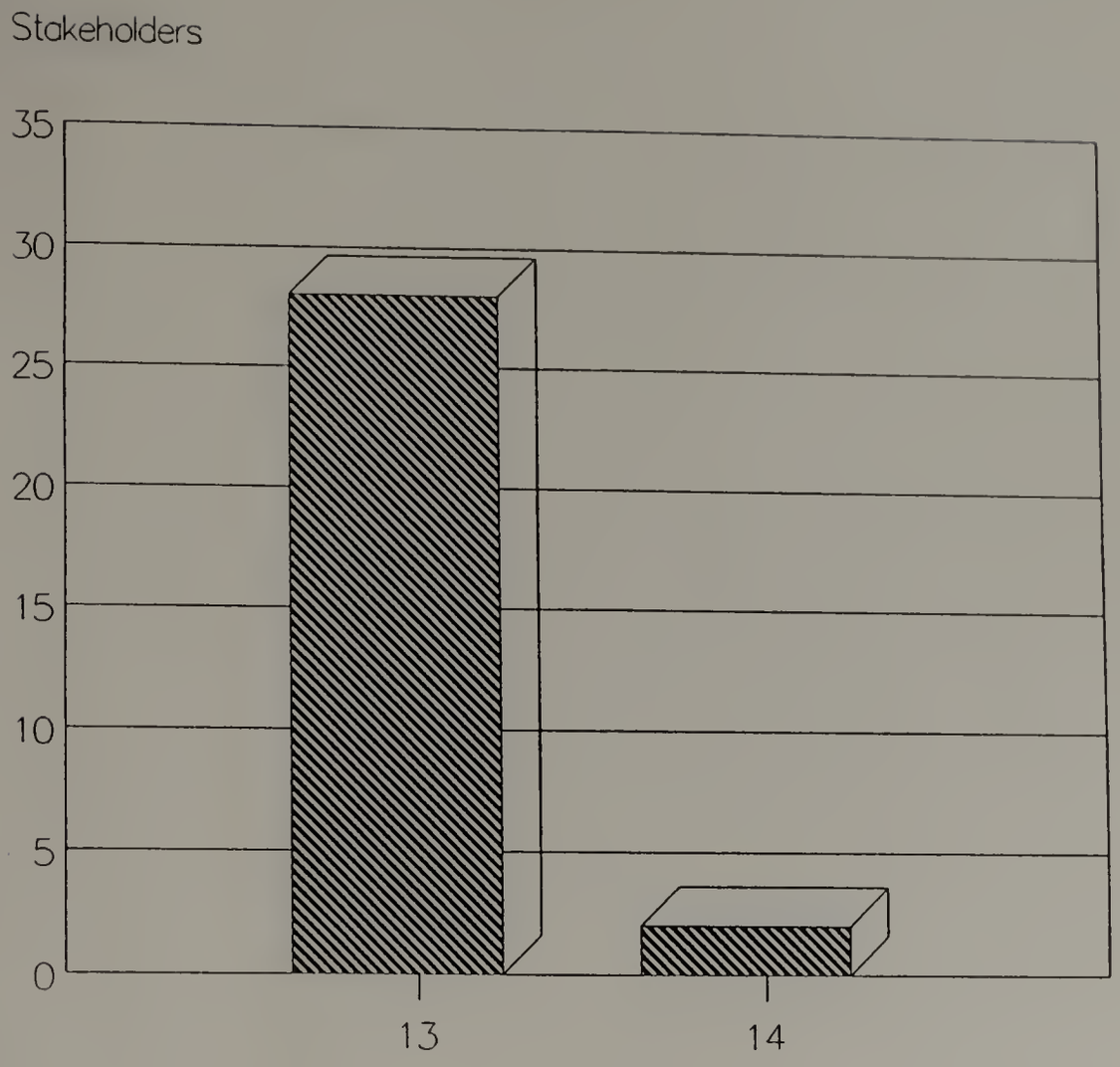


Figure 4.18. Stakeholder perception of self.

INTERVIEW ELEMENTS:

13. Effective as change agents
14. Not effective as change agents

but were often frustrated in their attempts to translate this into measurable gains. Reasons are many and varied (and are mentioned in other areas), but they include the building structure, its size, the state-mandated student population, and the insecurity felt about personal and institutional stability. Varied Support for Elements in Figures 4.17 and 4.18 are presented in Figure 4.19.

Question 6 asked participants to differentiate between definitions of "participative management" and "participative leadership," and to express agreement or disagreement with these definitions, contained elsewhere in this study (see Chapters 2 and 3). The STS/QWL Characteristic Elements Further Defined and Isolated are shown in Figure 4.20.

There are almost total agreement with the definitions offered by the researcher, with only three respondents expressing mixed opinions about their validity or application to CHS. Stakeholder Agreement with Researcher's Definition of "Participative Management" and "Participative Leadership" is depicted in Figure 4.21.

Problems were perceived in the translation of the paradigm to reality which included lack of administrative support and/or understanding as well as a lack of central office initiatives to demonstrate a long-term commitment. The time allowed for the implementation and evaluation of program goals was also viewed as a constraint or impediment to implementation.

Question 7 asked participants to determine if they perceived themselves or others to have been underemployed or underutilized during the period of the introduction of the STS/QWL paradigm at CHS and to comment on their answers regarding any implications and/or solutions. The

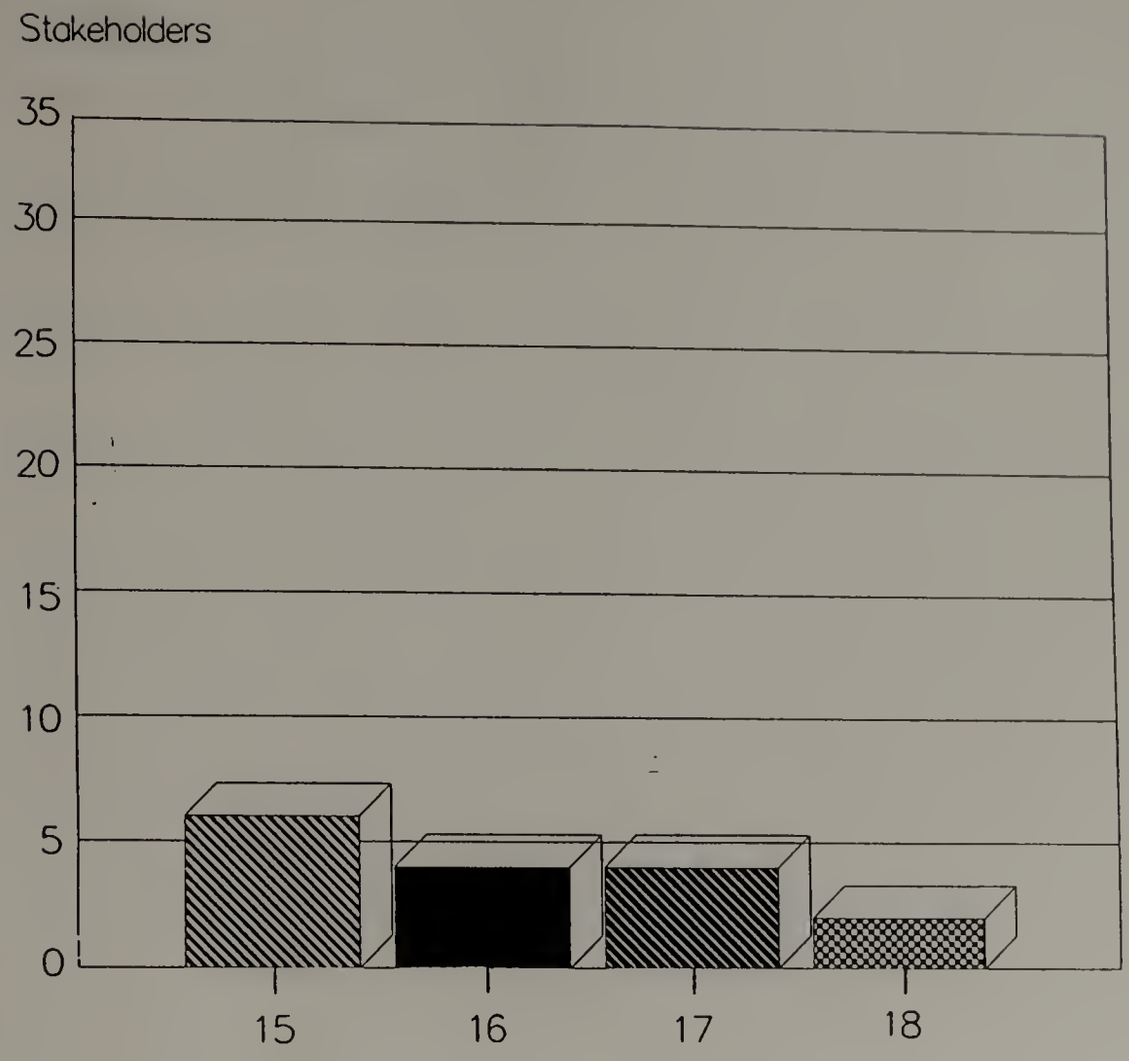


Figure 4.19. Varied support for elements in Figures 4.17 and 4.18.

INTERVIEW ELEMENTS:

15. Excessive time on noninstructional tasks
16. Lack of supportive feedback
17. Sense of community is supportive
18. Specific changes directly related to supervisor

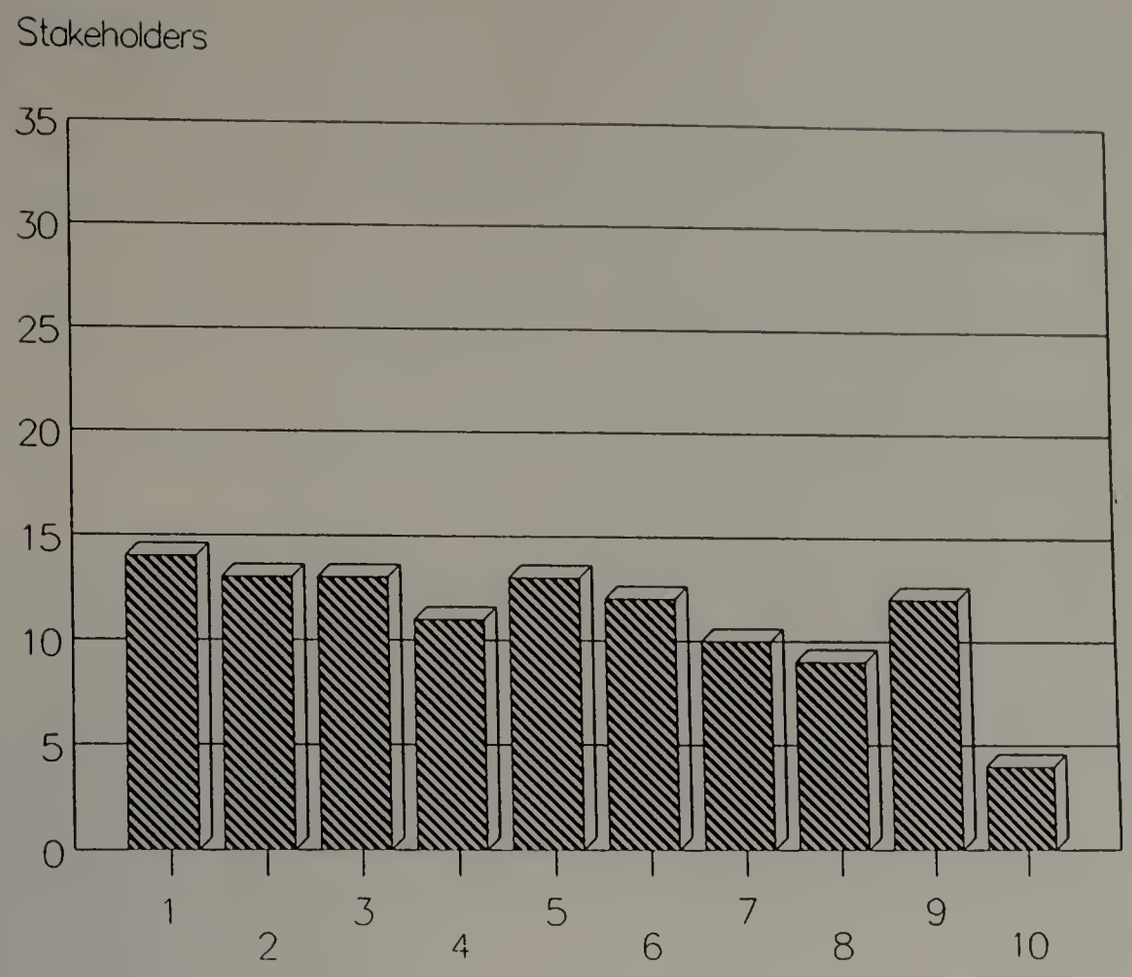


Figure 4.20. The STS/QWL characteristic elements further defined and isolated.

INTERVIEW ELEMENTS:

1. Shared power
2. Human values
3. Human resources developed
4. Organizational philosophy adaptive and flexible
5. Worker control
6. System open to participation and change
7. Cooperation and collaboration
8. Influence and respect in the larger society
9. Commitment and ownership
10. Innovation and risk-taking

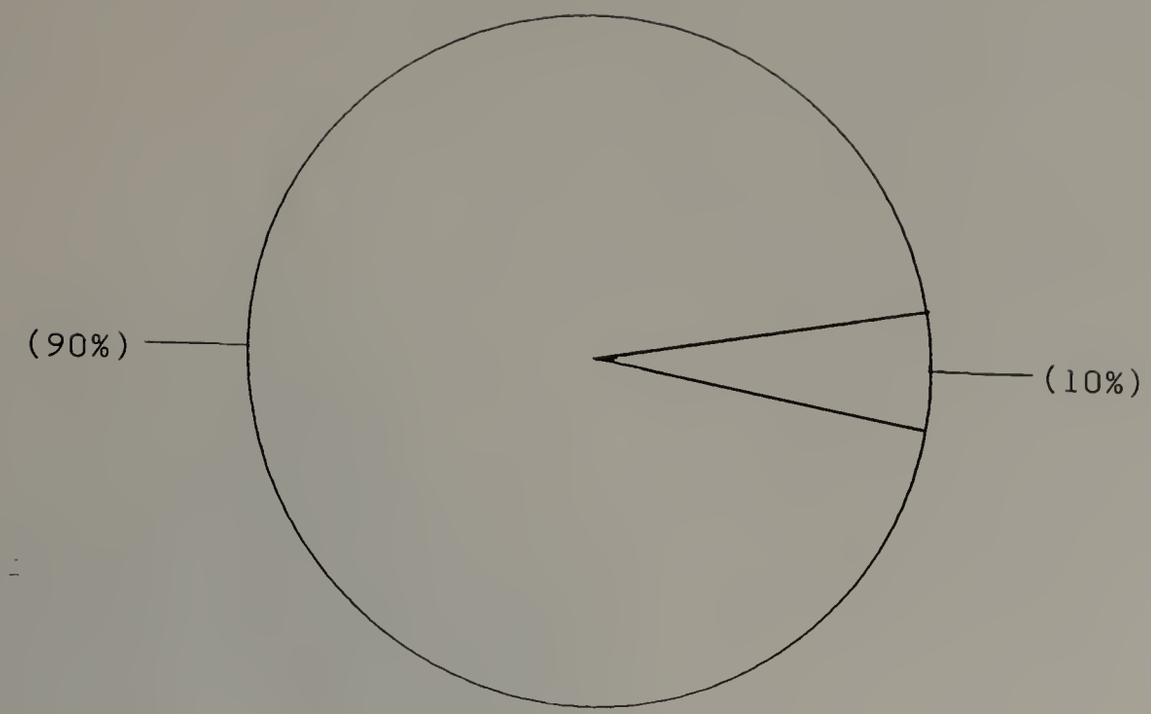


Figure 4.21. Stakeholder agreement with researcher's definition of "participative management" and "participative leadership."

STS/QWL Characteristic Elements Further Defined and Isolated are shown in Figure 4.22.

Respondents were split equally in their perceptions of being underemployed. More believed that they were underutilized during this period by not being able to use all of their talents. Stakeholder Perception of Being Underemployed/Underutilized is shown in Figure 4.23.

Dissatisfaction was evident in the amount of time teachers were expected to spend on noninstructional duties and tasks and were often frustrated by being required to perform menial and sometimes meaningless or inane assignments. This sense of frustration was fed by a perception that stakeholders were not included to a significant degree in decision-making or the setting of priorities. Many indicated that tasks and assignments were often duplications of effort and/or "make do" assignments resulting in a misuse of time and energy.

Some respondents indicated that an expansion of the school day or year and the offering of increased variety of options for teachers would help alleviate the situation. All seemed to indicate the need for more teacher empowerment and the sharing of decision-making processes. Stakeholder Response Levels Addressing Underemployment/Underutilization are presented in Figure 4.24.

Question 8 attempted to determine participants' attitudes towards leadership and the acceptance of authority in light of their individual perspectives and experiences. The STS/QWL Characteristic Elements Further Defined and Isolated are pictured in Figure 4.25.

Eleven respondents indicated a tendency towards acceptance, while sixteen were more skeptical of compliance. Five expressed mixed opinions

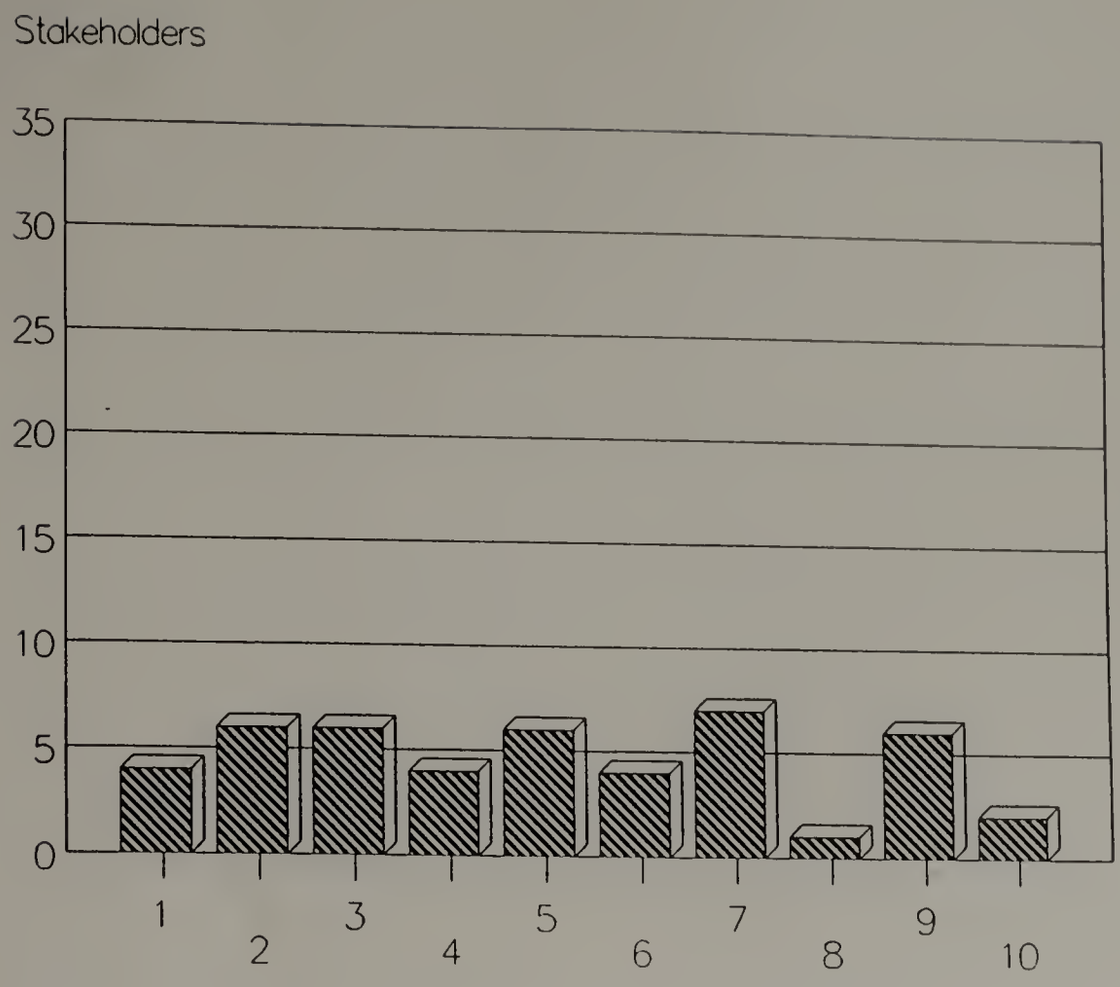


Figure 4.22. The STS/QWL characteristic elements further defined and isolated.

INTERVIEW ELEMENTS:

1. Shared power
2. Human values
3. Human resources developed
4. Organizational philosophy adaptive and flexible
5. Worker control
6. System open to participation and change
7. Cooperation and collaboration
8. Influence and respect in the larger society
9. Commitment and ownership
10. Innovation and risk-taking

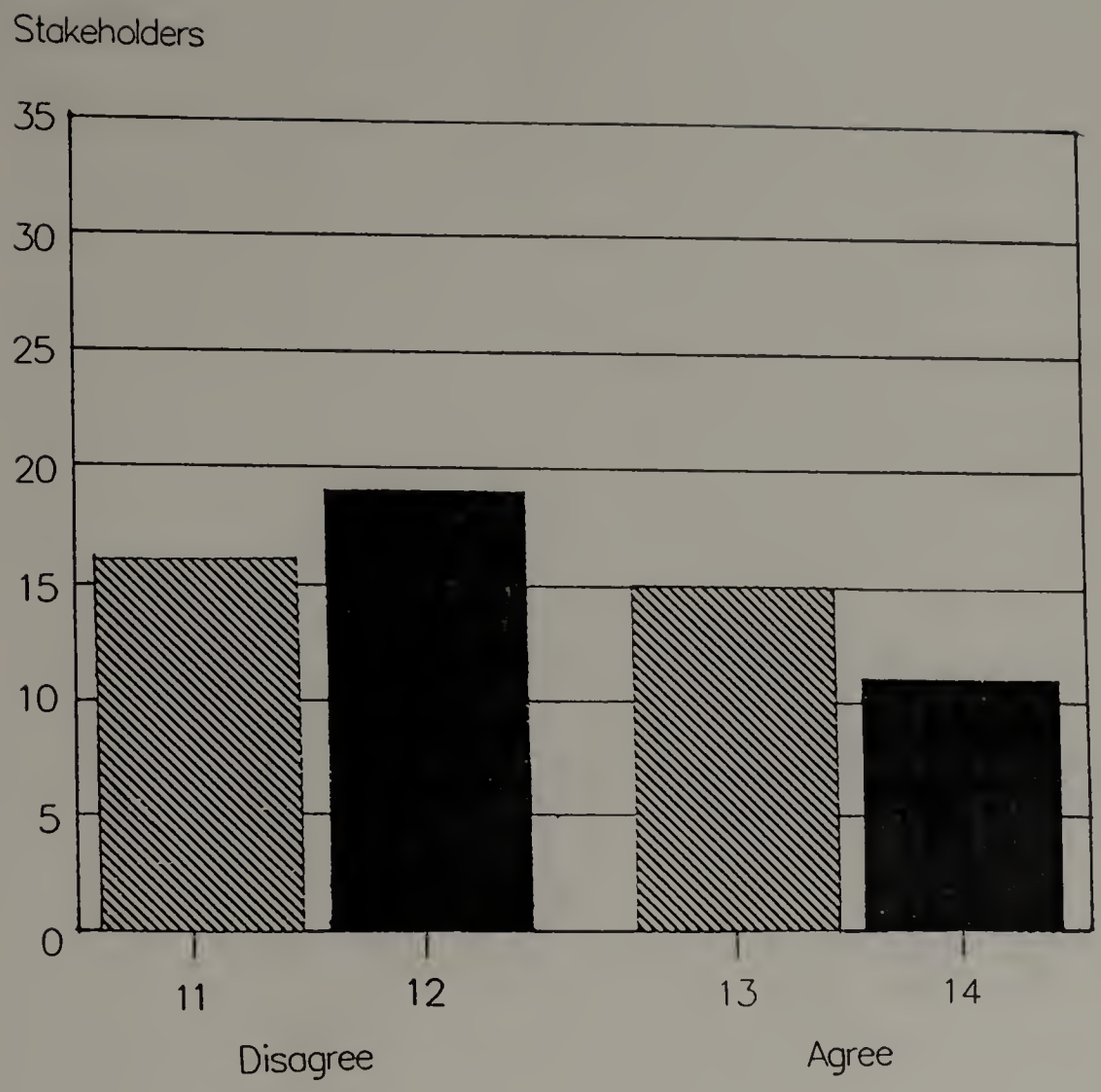


Figure 4.23. Stakeholder perception of being underemployed/ underutilized.

INTERVIEW ELEMENTS:

11. Underemployed
12. Not underemployed
13. Underutilized
14. Not underutilized

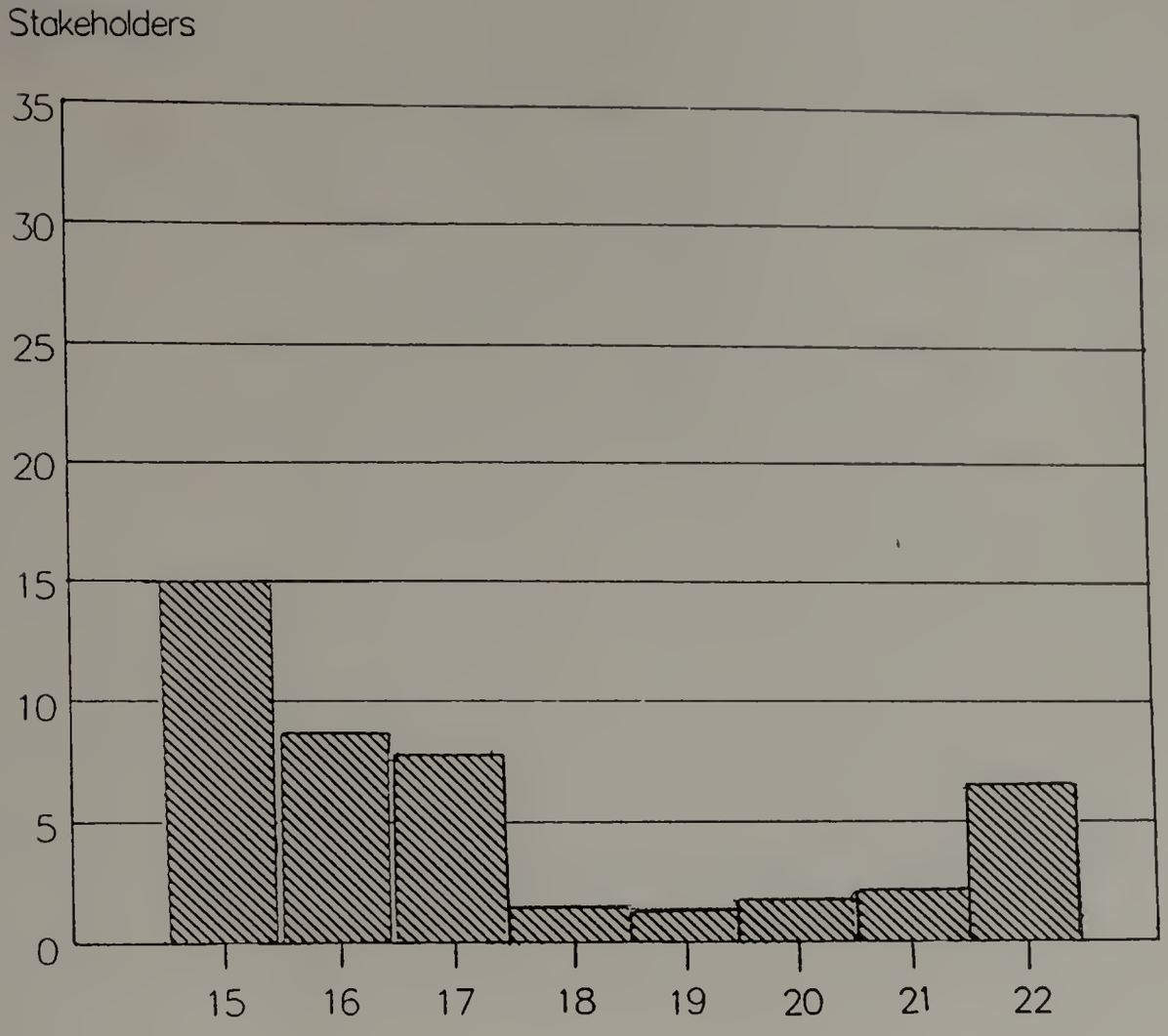


Figure 4.24. Stakeholder response levels addressing underemployment/ underutilization.

INTERVIEW ELEMENTS:

15. Excessive time on noninstructional tasks
16. Sense of frustration
17. Lack of teacher input
18. Task duplication--misuse of time
19. Administrator's personality (+) (-)
20. Expand school day/year
21. Increased variety of teachers
22. More teacher empowerment

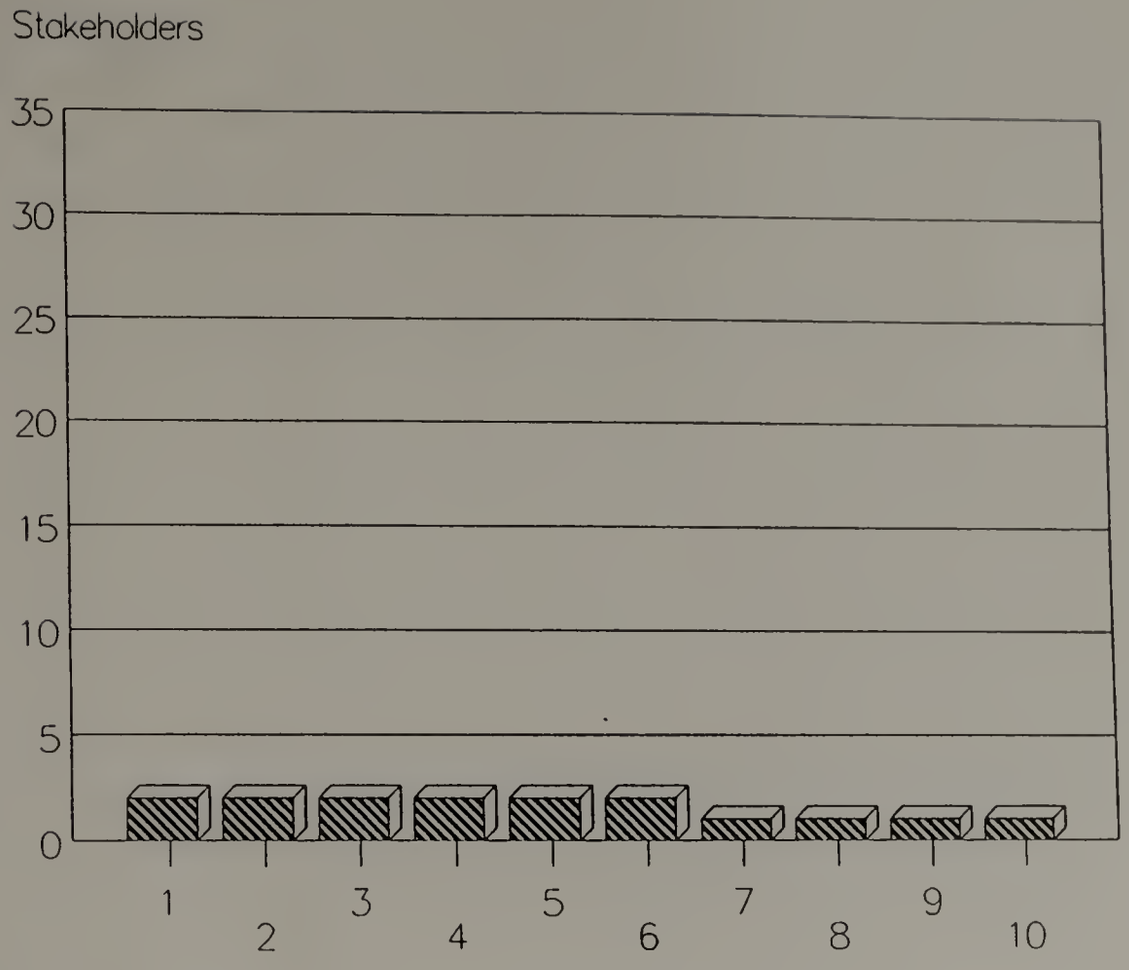


Figure 4.25. The STS/QWL characteristic elements further defined and isolated.

INTERVIEW ELEMENTS:

1. Shared power
2. Human values
3. Human resources developed
4. Organizational philosophy adaptive and flexible
5. Worker control
6. System open to participation and change
7. Cooperation and collaboration
8. Influence and respect in the larger society
9. Commitment and ownership
10. Innovation and risk-taking

and attitudes. The same general split was evident in regard to stakeholders' attitudes toward the acceptance of authority. Stakeholder Perception of Acceptance of Leadership/Authority is presented in Figure 4.26.

The overwhelming majority indicated a refusal to surrender or compromise their individual participatory and democratic preferences and commitments. A few indicated that they could conceive of circumstances where it might be necessary to do so depending on the situation or the "need to keep a job." Stakeholders Who Would Surrender Their Democratic Principles and Practices are shown in Figure 4.27.

Most indicated that the situation would have an effect on their decisions although they also indicated an innate and "healthy disrespect" for, rather than opposition to, authority.

Again, the desire for inclusion in power and decision-making emerges as the most prominent and desirable element in the change effort. Stakeholders' Generalized Perceptions to Responses in Figures 4.26 and 4.27 are shown in Figure 4.28.

Question 9 asked participants to rate the effectiveness of autonomous teacher teams in a high participative management paradigm in terms of their offer to improve the quality of working life. The STS/QWL Characteristic Elements Further Defined and Isolated are shown in Figure 4.29.

Those who agreed with the concept emphasized its positive effects, such as the building of staff cohesiveness and sense of empowerment. Many felt that individual professional performance would also be improved through the sharing process and that new options and challenges

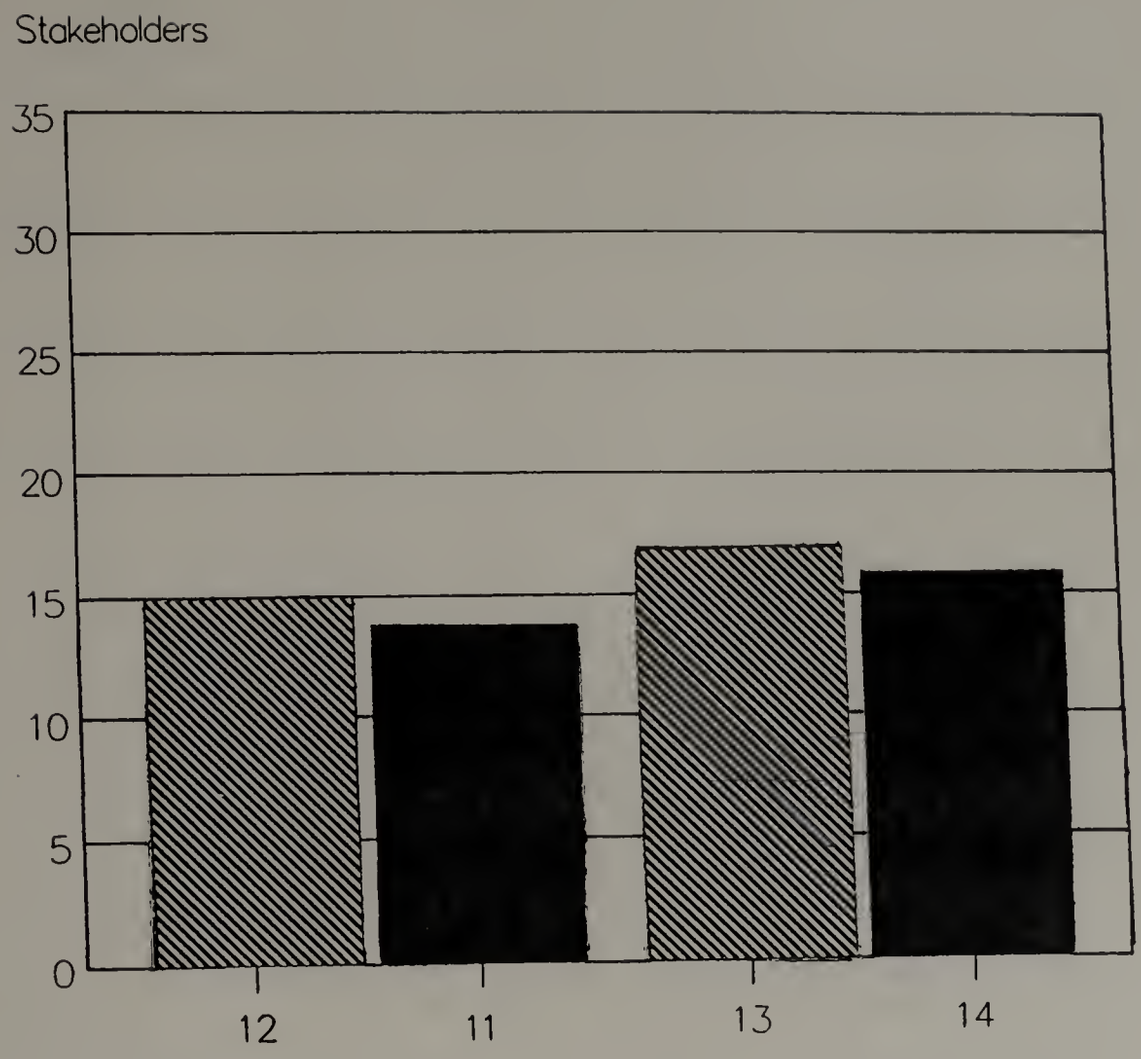


Figure 4.26. Stakeholder perception of acceptance of leadership/ authority.

INTERVIEW ELEMENTS:

11. Accept leadership
12. Less skeptical
13. Accept authority
14. Less skeptical

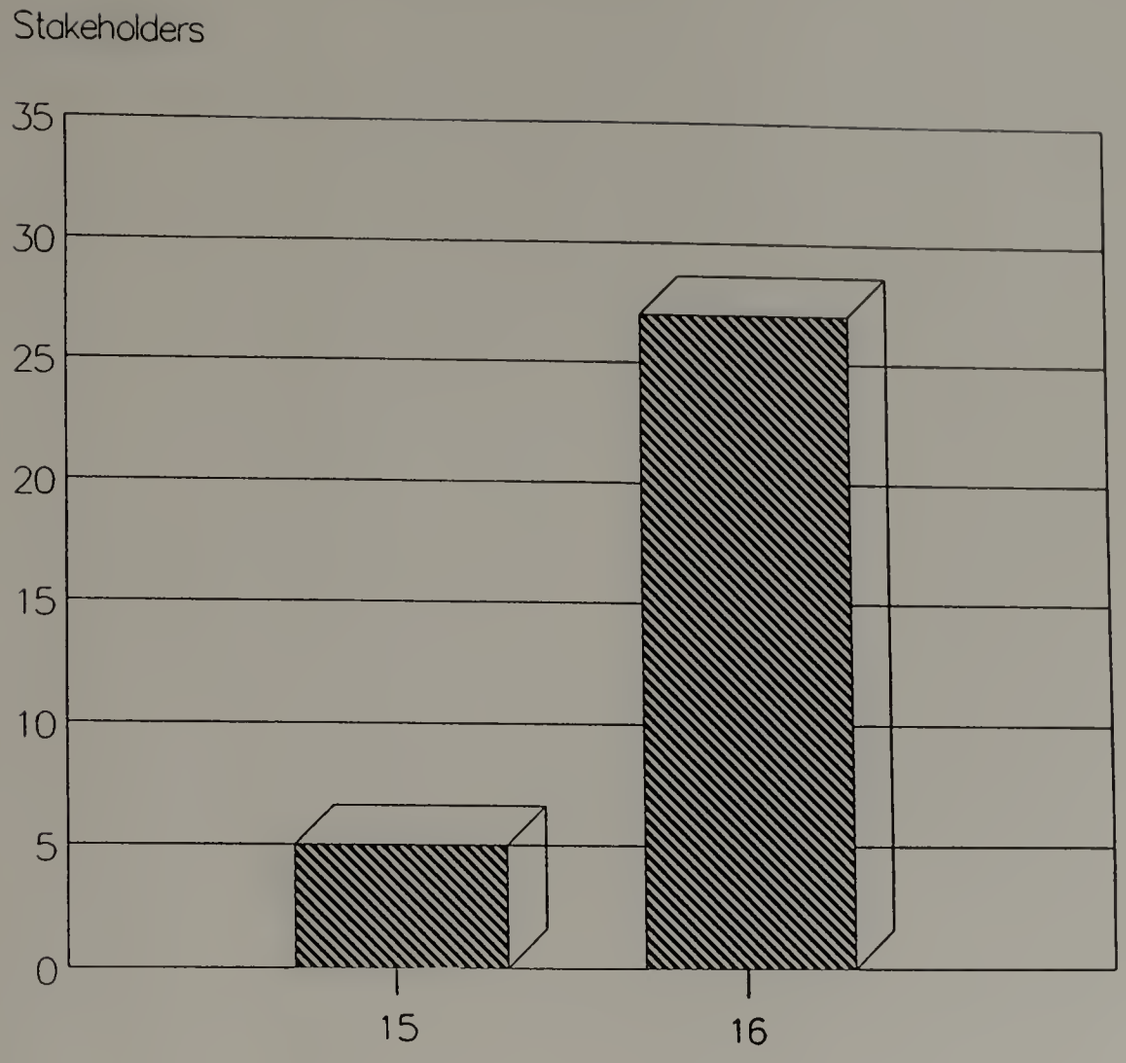


Figure 4.27. Stakeholders who would surrender their democratic principles and practices.

INTERVIEW ELEMENTS:

15. Would surrender
16. Would not surrender

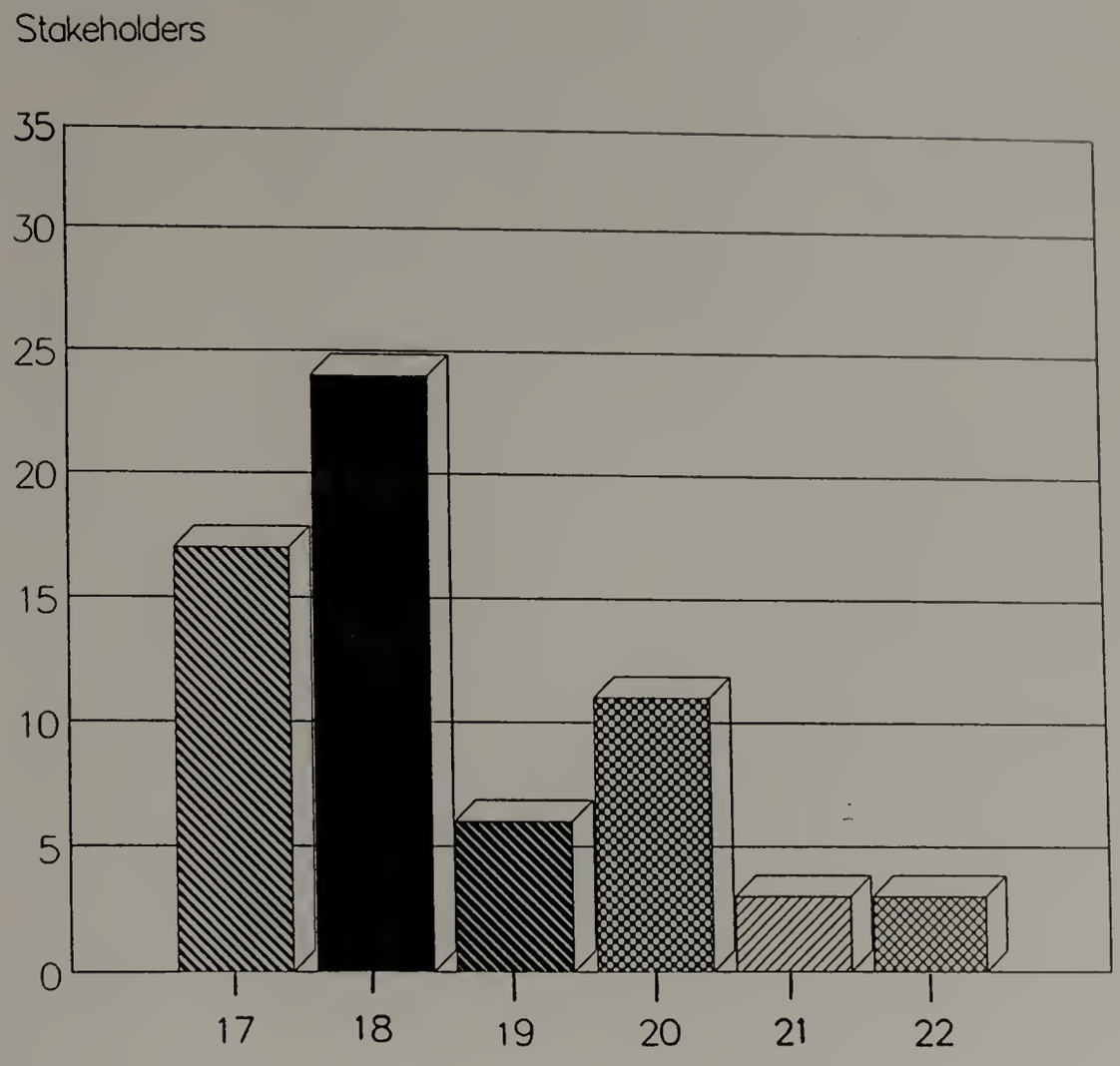


Figure 4.28. Stakeholders' generalized perceptions to responses in Figures 4.26 and 4.27.

INTERVIEW ELEMENTS:

17. Healthy disrespect (not opposition)
18. Situation defines response
19. Leadership invites participation
20. Surrender--No; Compromise--Yes
21. Attempts at participation often frustrated
22. Follow orders to keep job

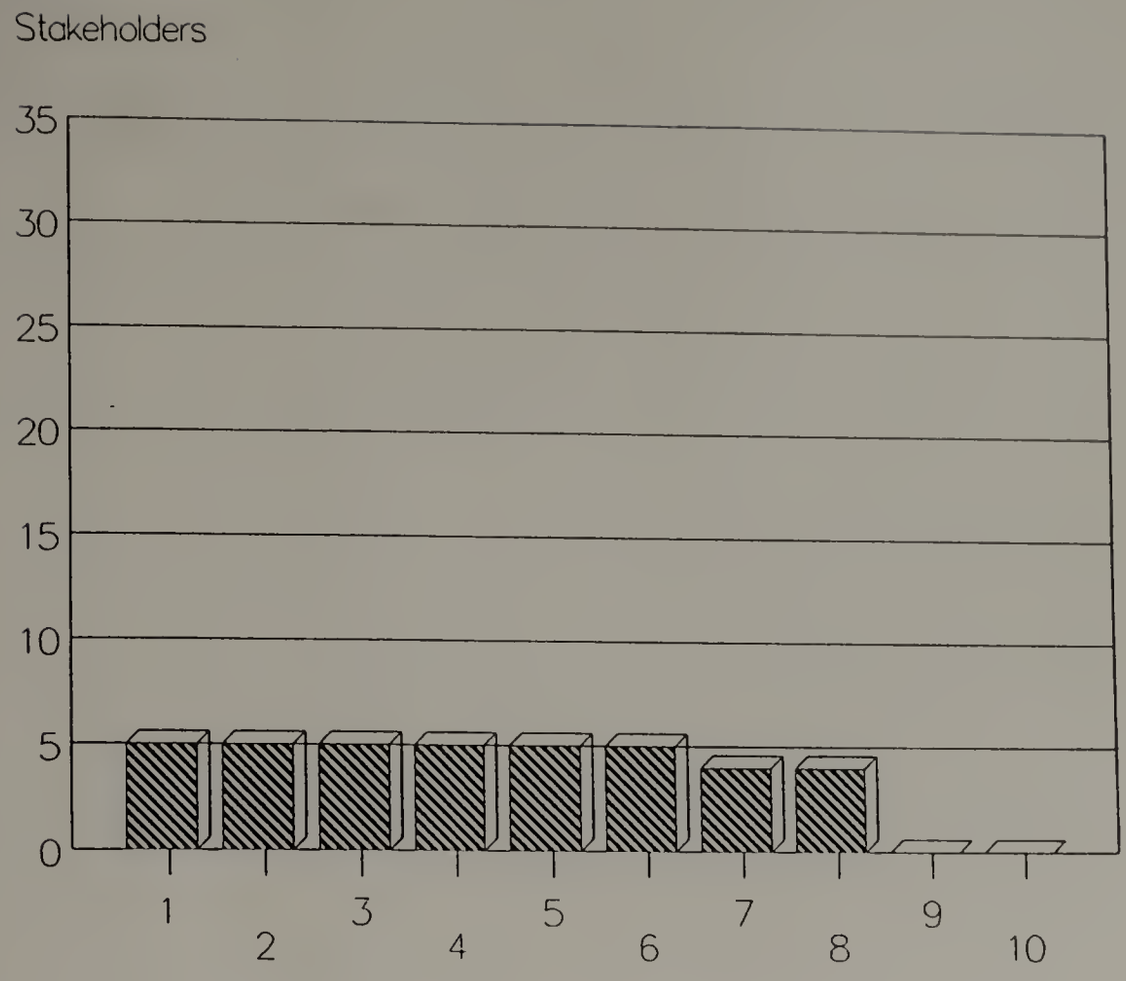


Figure 4.29. The STS/QWL characteristic elements further defined and isolated.

INTERVIEW ELEMENTS:

1. Shared power
2. Human values
3. Human resources developed
4. Organizational philosophy adaptive and flexible
5. Worker control
6. System open to participation and change
7. Cooperation and collaboration
8. Influence and respect in the larger society
9. Commitment and ownership
10. Innovation and risk-taking

would be developed as a result. Team Effectiveness as Perceived by Stakeholders is shown in Figure 4.30. Positive Elements of Teacher Teams is shown in Figure 4.31.

Only three respondents felt that the autonomous teacher teams would be ineffective or an intrusion on individual options. These people felt that teams would interfere with the "one teacher - one classroom" ideal which promotes optimum effectiveness and performance. Negative comments indicated that the experiment would be too time-consuming and that it lacked sufficient monetary or other tangible incentives to participation. One individual felt that it might help to protect ineffective or weak teachers and provide a haven for mediocrity. Negative Elements of Teacher Teams recorded from stakeholder responses is shown in Figure 4.32.

Question 10 asked stakeholders to indicate those work conditions and/or specific areas of need that should be addressed in the organization of an urban secondary school which would improve the quality of working life.

The most important individual factor identified by stakeholders as contributing to the improvement of their quality of working life was an increase in safety and security at CHS. Respondents felt that, until security and order were restored to the daily operation of the building, any change effort or chance for institutional revitalization would be doomed a failure.

General working conditions including aesthetic concerns and the overall cleanliness of the building itself ranked second in importance. The need for increased availability of textbooks and supplies was

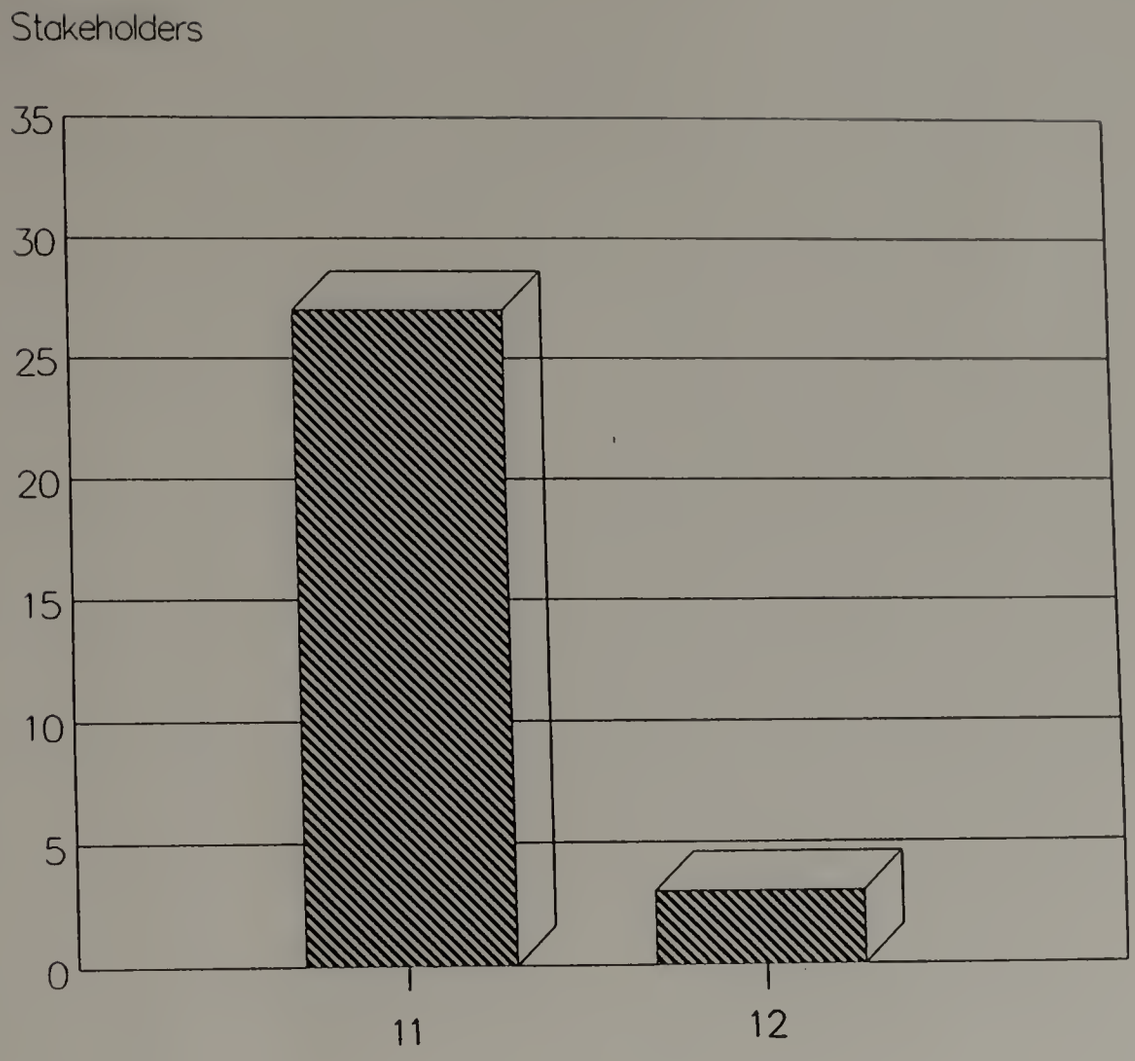


Figure 4.30. Team effectiveness as perceived by stakeholders.

INTERVIEW ELEMENTS:

11. Effectiveness of teams
12. Noneffectiveness of teams

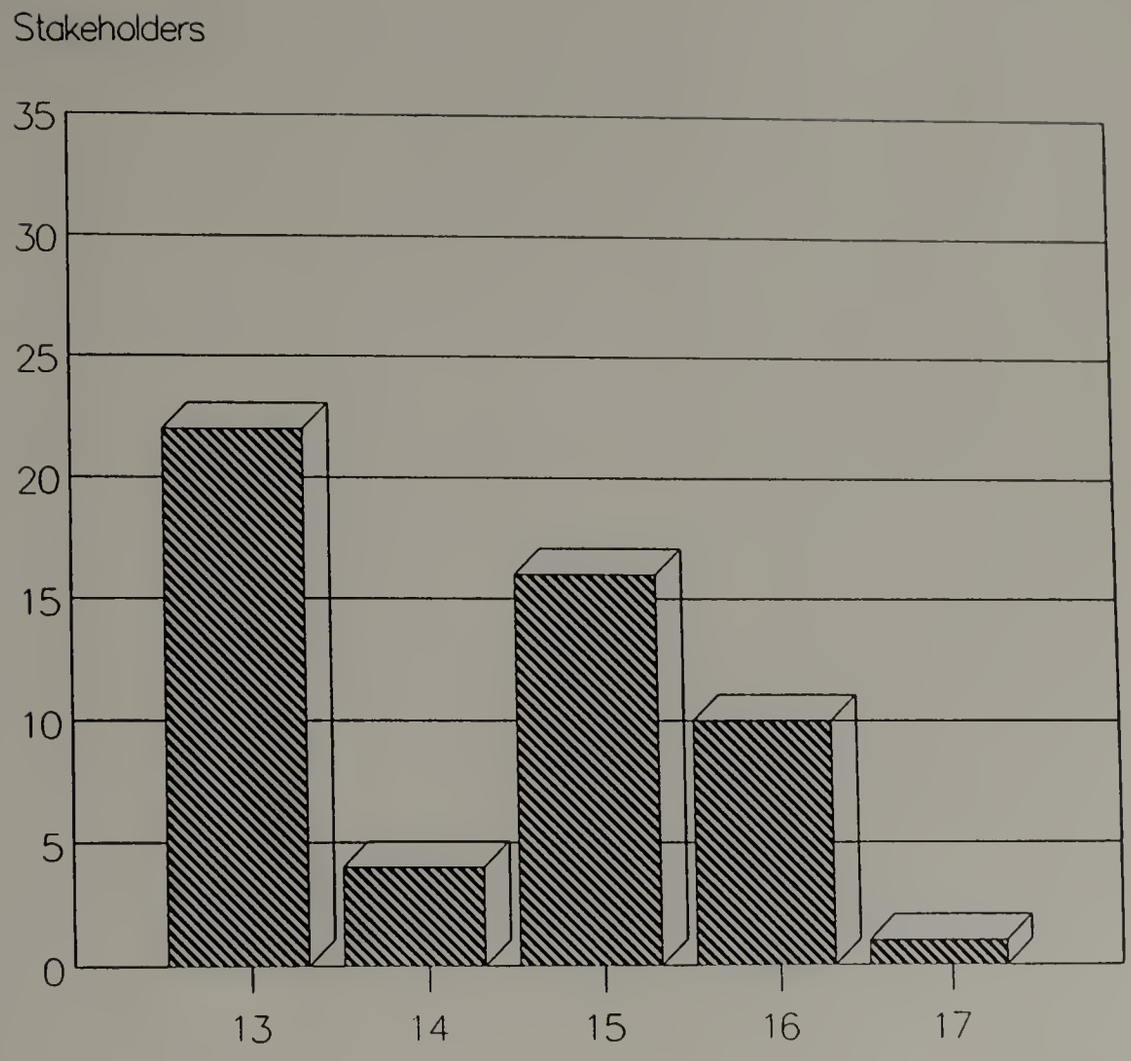


Figure 4.31. Positive elements of teacher teams.

INTERVIEW ELEMENTS:

13. Building of staff cohesiveness
14. Better discipline
15. Improved individual teaching
16. Improved self-esteem
17. School size demands it

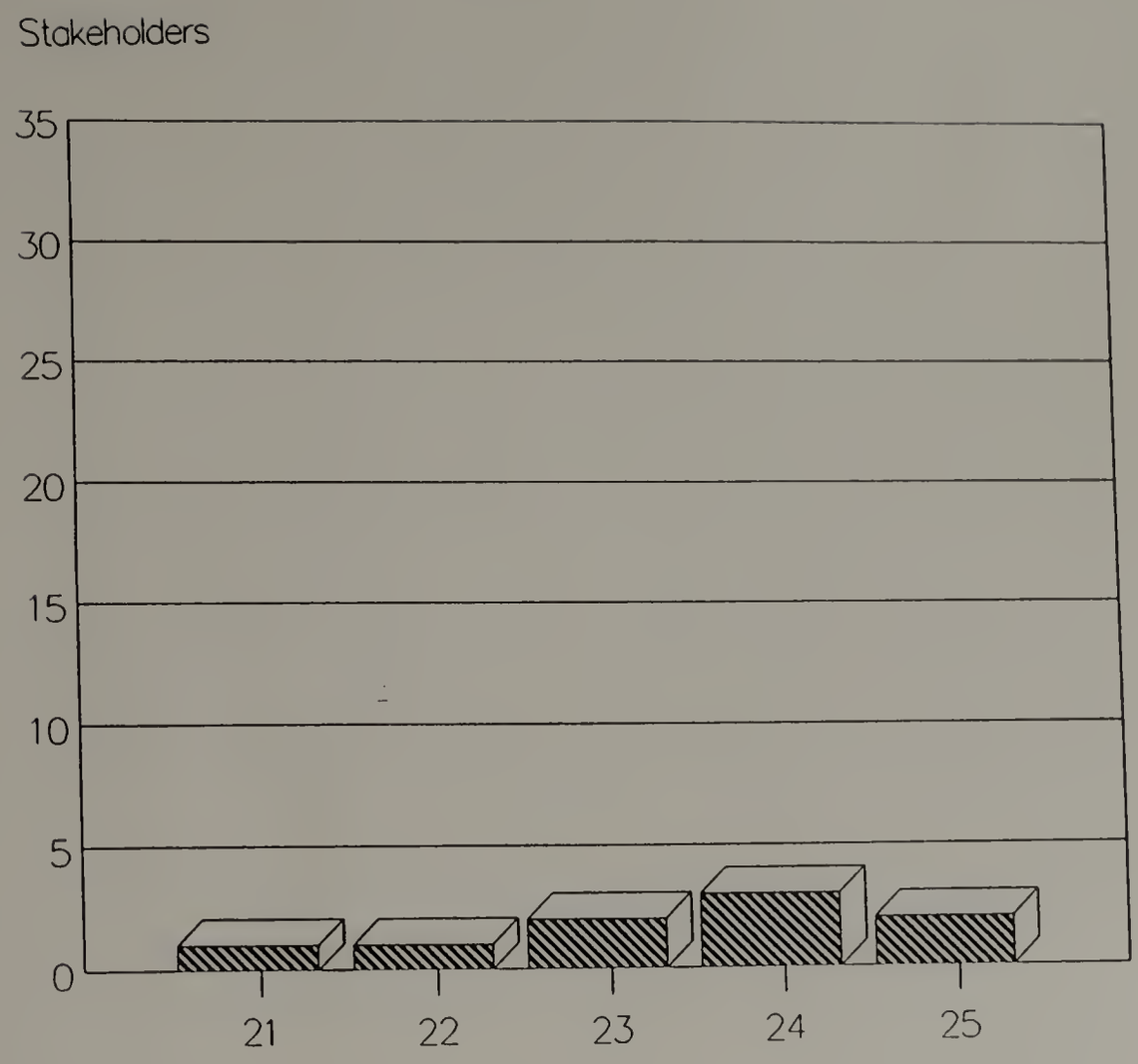


Figure 4.32. Negative elements of teacher teams.

INTERVIEW ELEMENTS:

21. Time-consuming
22. Lack of incentive
23. Protects "weak-link" teachers
24. Loss of one room, one teacher
25. Increases teacher personality clashes

followed by the need for teacher empowerment and the desire for the demonstration of appreciation for teacher efforts.

Less important were concerns about discipline, team-building, parental involvement, absenteeism, and salary concerns. Critical Issues Requiring Attention in the Organization of an Urban Secondary School cited by stakeholders are shown in Figure 4.33.

Question 11 was an open-ended invitation for respondents to suggest additional questions for consideration and inclusion in the study. While most people indicated no desire to increase or elaborate upon the existing interview protocol, a number of suggestions were offered, and three were incorporated into the questionnaire. All these questions dealt with leadership and the role of personality in the implementation of the STS/QWL paradigm at CHS. Of the twenty-four respondents who expressed an opinion about the effect of the personality of the headmaster and/or administration, twenty-four felt there was a discernible impact. Fourteen perceived this as positive or impelling, and eight, as a negative or obstructional force. Effects of Personality of the Headmaster in His Role are shown in Figure 4.34.

Generally, interviewees perceived the impact of the role of the administration to be either neutral or as a less than effective impelling force. Reasons for this ranged from the perception that the headmaster/administration were in a holding or interim position and were themselves reluctant to take a firm leadership initiative or to inspire it in others to a generally held belief that this was part of a larger plan for CHS generated consciously by the superintendent and school committee.

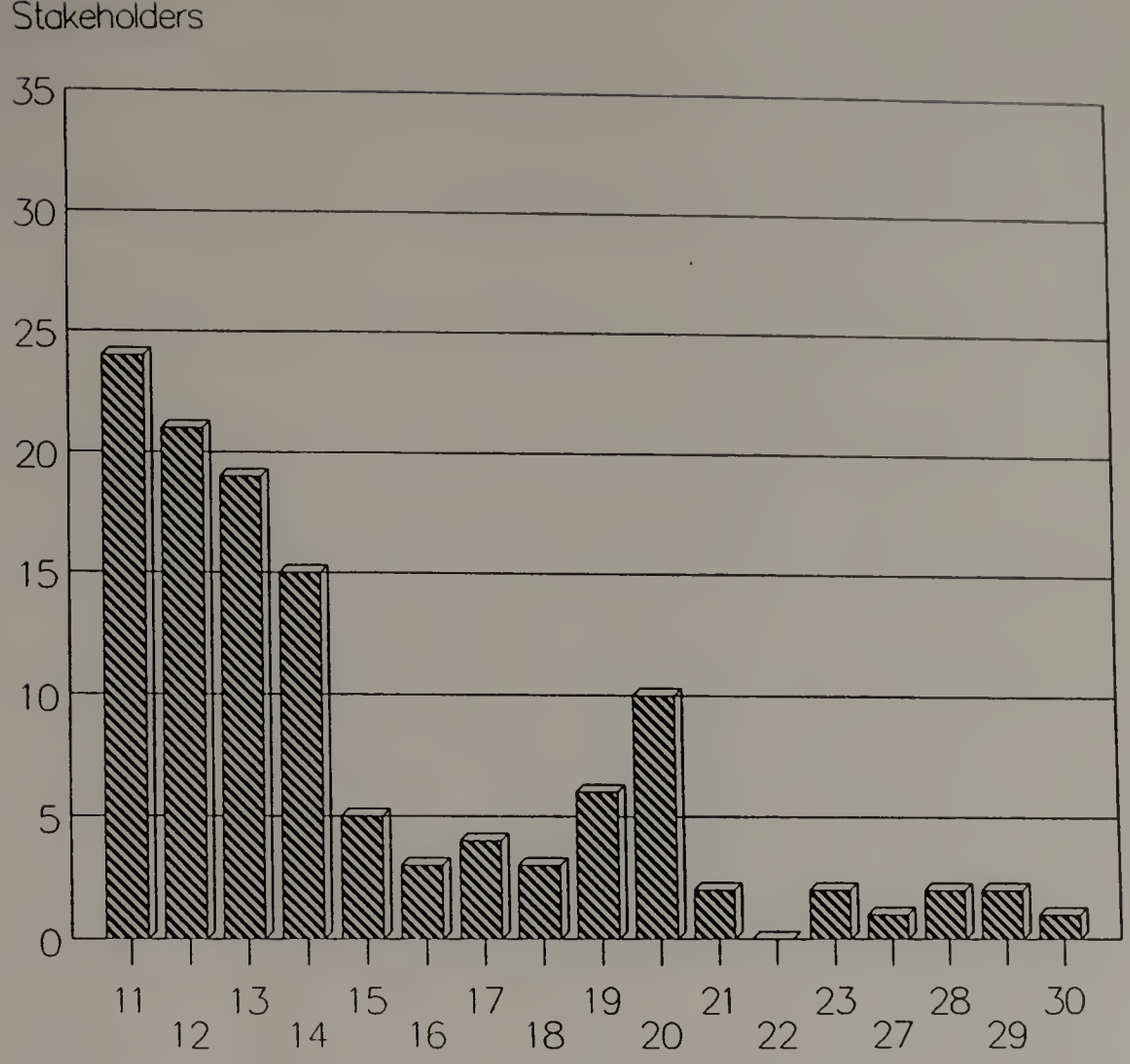


Figure 4.33. Critical issues requiring attention in the organization of an urban secondary school.

INTERVIEW ELEMENTS:

11. Safety and security
12. Clean building
13. Textbooks/supplies
14. Shared power
15. Team-building
16. Parental involvement
17. Noninstructional needs
18. Absenteeism
19. Discipline
20. Appreciation for teacher
21. Money
22. Back to basics
23. Larger faculty, smaller classes
27. Outside forces
28. Lack of strong leadership
29. Isolation building to building
30. Busing a minus

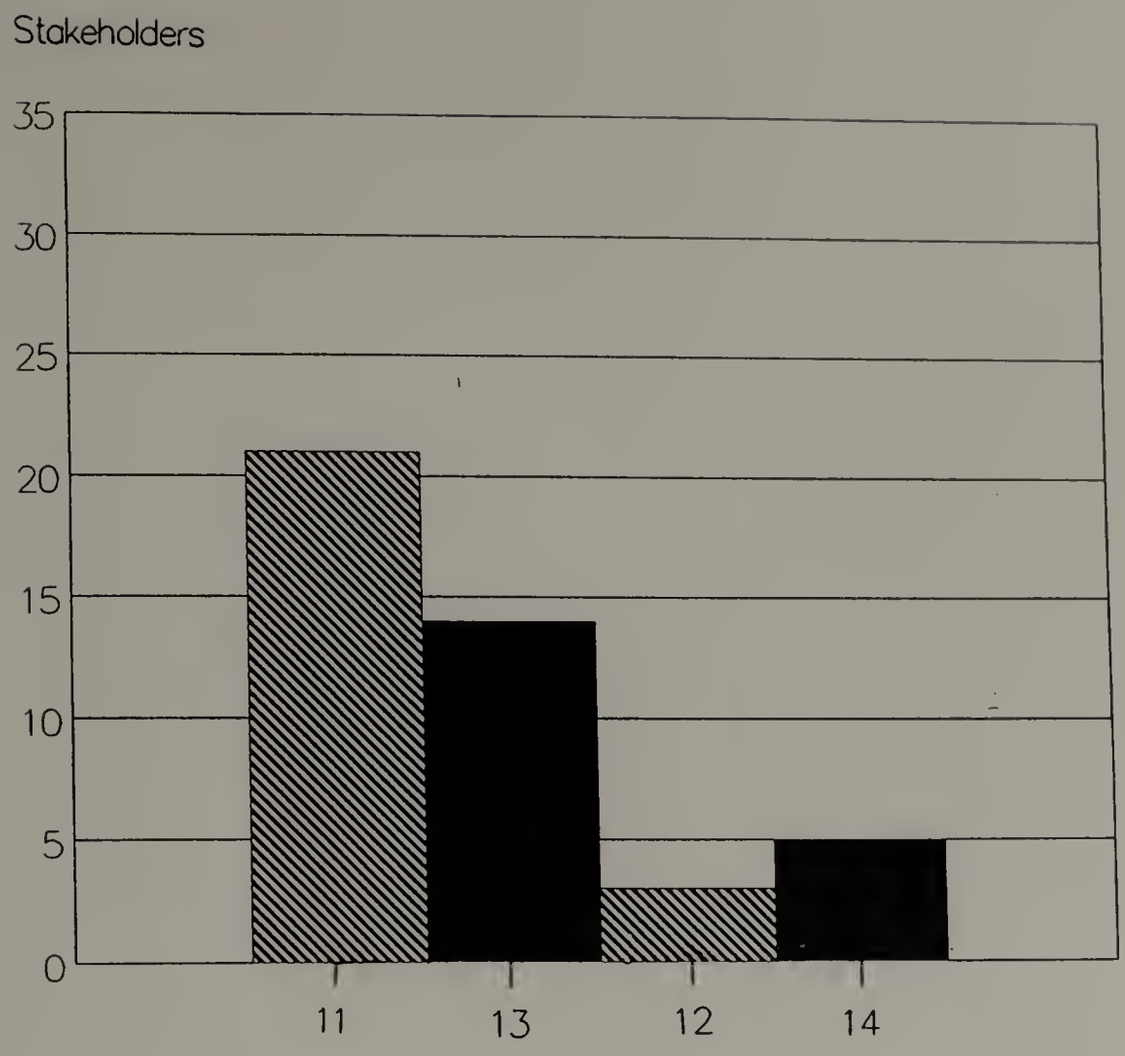


Figure 4.34. Effects of personality of the headmaster in his role.

INTERVIEW ELEMENTS:

11. Personality played a role.
12. Personality did not play a role.
13. Personality was positive.
14. Personality was negative.

The number of people/programs/agendas for leadership and as centers of power was increasing, but was also becoming increasingly diffuse and impotent. This, for many respondents, seemed to foster a reluctance on the part of stakeholders to commit themselves to any one clear personality or approach. The personality of the researcher was cited by seventeen as positive, and by four as neutral or negative. Several individuals indicated that, in the apparent vacuum of effective leadership centers at CHS during this period, the leadership of the STS/QWL program provided a clearer sense of control and direction than that provided elsewhere. Effects of Personality of the Researcher in His Role are shown in Figure 4.35.

Six optional questions were included in the interview protocol to gain further insight into stakeholders' perceptions recording the implementation process.

When asked in Option Question 1 about the role of the corporate and business partnerships in the educational process, all but three respondents indicated a positive response. Most felt that support should be increased in certain areas such as providing summer internships, scholarships, mentor programs, and jobs. Some suggested motivational and career counseling programs for the faculty as well as students. Generally, the responses indicated that business was contributing but could be contributing a great deal more in developing more effective leadership.

When asked in Option Question 2 to identify those areas in which business could become more effectively involved in improving teacher excellence and upgrading the quality of working life in schools for stakeholders, the two most common responses were to provide financial

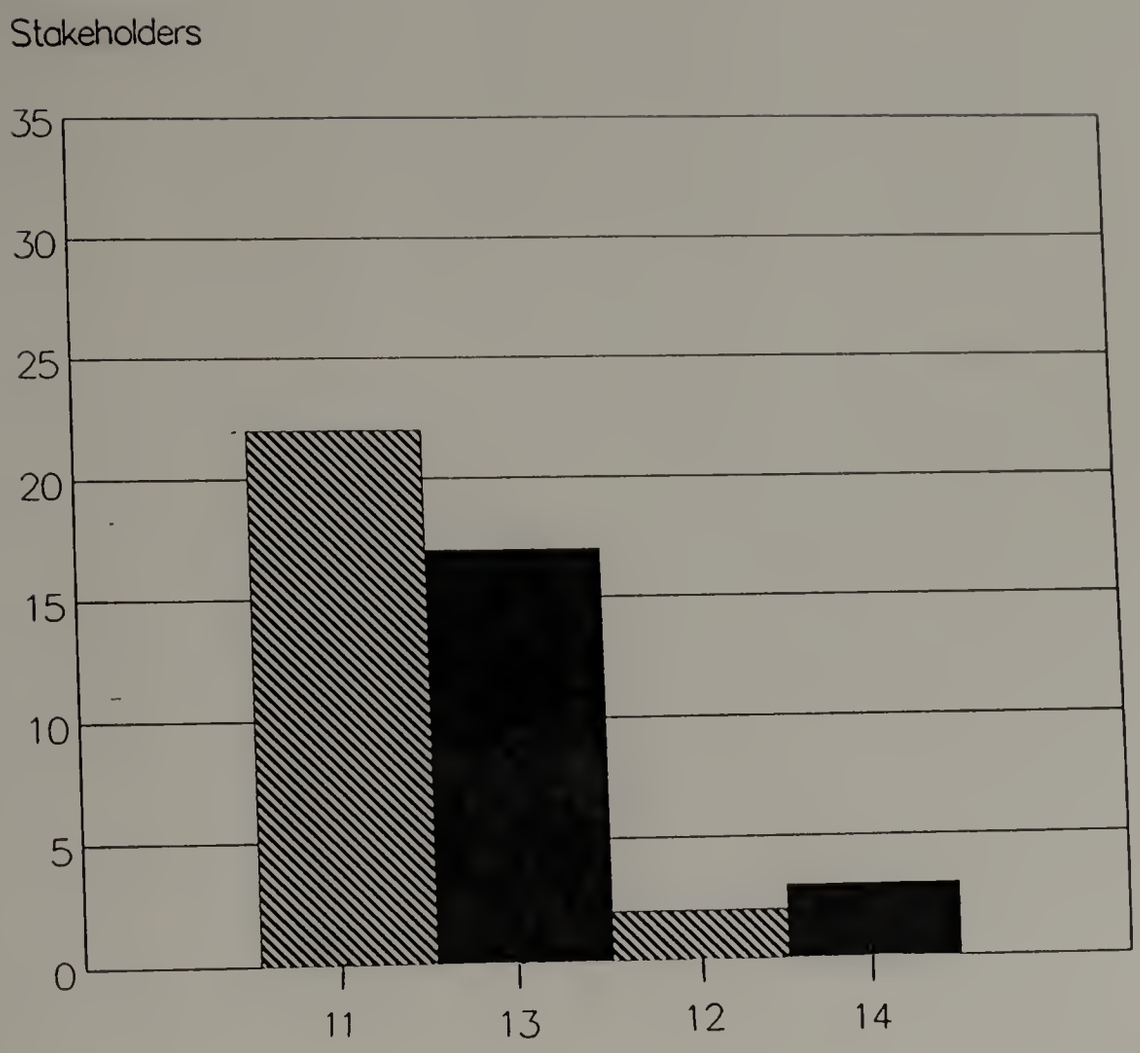


Figure 4.35. Effects of personality of the researcher in his role.

INTERVIEW ELEMENTS:

11. Personality played a role.
12. Personality did not play a role.
13. Personality was positive.
14. Personality was negative.

assistance for planning time and team-building, and working more closely with faculty regarding curriculum and program development.

Respondents also indicated a desire for industry to provide seminars or programs for teachers contemplating career changes and moving into industry. Some suggested summer programs or exchange opportunities to enhance understanding and cooperation between the worlds of work and schooling.

In Optional Question 3, respondents were asked if, given the opportunity, they would choose teaching as a career once again. Eighteen replied "Yes" (although two replied, "Yes, but not in Boston"), and five replied "No."

Reasons for positive responses included a love and excitement felt for the profession, the opportunities it provides for contributing to society, and other altruistic motives, to the more mundane and less often expressed motivators such as the calendar and vacation schedule to the rather self-deprecating self-analysis "It's the only thing I can do."

Negative responses were motivated by such factors as the low pay, lack of motivation and opportunities, the psychological stress involved in the profession, and the perception that teaching was a "dead end."

Respondents were almost equally unenthusiastic in the responses to Optional Question 4, which asked if they would encourage their own students to pursue careers in education today. Most qualified a positive response with statements indicating they would do so only for the "right students" or those with the "right motivations." Negative responses mirrored those for Optional Question 3.

When asked when they wished to retire from the profession, in Optional Question 5, most interviewees indicated either "Never" or "At Age 65." Only a few hoped to leave as soon as possible or within the next five years. Of those wishing to leave early, the main factors were the desire for more challenges and the sense of personal and professional frustration.

Optional Question 6 asked respondents to comment on their perceptions of the impact professionalization would have on teaching. Most saw a positive impact, a few anticipated negative results, and the remainder felt it would have little or no impact.

Personal positive impact was seen in improved self-image and effectiveness as well as an increase in influence and power for stakeholders in the workplace--a general improvement in the quality of working life.

The impact of professionalization on teaching as a whole was seen as having many diverse implications. Respondents generally felt it would increase the reality base of education while improving the morale and professional self-esteem of stakeholders. An increase in appreciation and valuation of teaching was also anticipated in the larger community as a result of the revitalization of the profession, although a few respondents indicated that it might have the negative impact of removing the teacher from the community he or she served.

Ethnographic Summary with Interview Selections

This section presents a representative sample of the interviewee responses applied to each of the open-ended questions analyzed above in

this chapter (see Appendix K for the question schedule). These interview selections were made independently in accordance with the framework established for the interview analyses. All questions attempt to identify, define, and isolate the STS/QWL constructs/conditions that characterize a model for urban secondary school management that would enhance the improvement of the quality of working life in that environment for stakeholders.

The responses to Question 1, which related to the STS/QWL characteristics, the obstacles and contaminants, and evaluation of the paradigm (model), indicated that most interviewees endorsed the model and its recognition of human values and the need for particiaption. In the following interview selections, evidence for this conclusion and some critical reactions are given:

> Mr. Adam: [It was] successful because it was an internal program and . . . did not bring in outsiders or experts who supposedly would offer a panacea.
>
> Miss Betty: It is important to be treated as a human being. . . . I was able to exercise a lot of choice and variety.
>
> Mr. Bird: I was willing to spend even more time at the school. If everything is dictated, you just want to put in your eight hours a day and get out.
>
> Mr. Blue: Everyone had a stake; one one was a peon.
>
> Mr. Burger: Any model which is going to be effective in an urban high school has to have teachers who have the feeling they are being listened to and have their experience and knowledge of the classroom respected.
>
> Mr. Casey: I felt like an integral part of the whole system, allowed to experiment with educational processes for each student individually. . . . It more or less gave us our own self-motivation. . . . The quality of education improved 100 percent.

Mr. Cooper: We were always asked what we thought and whether we were going the right way. . . . We were able to explore.

Miss Hepburn: It gives the teachers the freedom to use their own methods in a way that they know they can be successful.

Mr. Jay: I think it showed that a significant change was possible.

Miss Jessye: The more control you have over your own job, the more you will do.

Mr. Richard: The quality of my working life improved . . . and there was a sense of trust and respect.

Mr. Sharon: That gap [between teaching faculty and administration] was bridged. . . . It was a remarkable change.

Mrs. Williams: The budget was an open entity. . . . Everybody felt they got a fair share of the pie.

Some stakeholders noted the psycho-social dimension:

Mr. Duke: Improvement comes from people being more honest and treating people like decent human beings. . . . In the last ten years, we have had five administrations coming in with their own unique style and, in reality, there is no big difference.

Mr. Good: Those who are going to make a difference in the management model are going to be making a difference in the learning and will be involved in the running of the model; and those who don't make a difference are those who are not going to participate.

Mr. Lee: If you had a really homogeneous group of teachers . . . they could do it. But where we have such a diversified group . . . a little tighter grip to keep the organization pointed in the right direction would be better.

The obstacles and contaminants were perceived as the central office initiatives. Ms. Jippe summed it up as follows:

On what we call our central office organizational staff, a higher level of the hierarchy . . . there were other issues being decided . . . and, unfortunately, that was not being perceived by the hierarchy . . . at central office.

The interviewees agreed that the model could work, and some declared that it did work in spite of the contaminants. However, some criticisms were given. Mr. Purple cited the size of the building and the timing of the program as negative factors. Mr. Duke pointed out:

> In a teaching profession, [the worker's] product is the students, and how do we judge that he has been successful? The fruits of his labor can be obvious perhaps only many years later.

Question 2 addressed the need for shared power in an open system and conflict resolution with reflective and critical discourse. The interviewees stressed that, with shared power, conflict could be resolved easily and produced solutions to problems. Miss Nancy felt, "I was given really a minimal amount of interjection from administration, and it was ultimately my decision to carry [strategies] out." Ms. Jippe pointed out the "opportunity for dialogue." This, according to Miss Betty, "helped to eliminate the conflict and hostilities people carried around with them." Mr. Casey, Mr. Blue, and Mr. Richard cited the freedom to discuss and resolve problems to the satisfaction of all parties involved, "even if we didn't get our way." Mr. Jay pointed out that, in a school environment, "you are always involved in some sort of conflict," and added that help was always available. Mr. Cooper cited the ease of dealing with potential problems during the preparation for Black History month.

> Mr. Alley: This model has allowed for some strategies which seek some solutions by attacking the source of the problems, which was not always the kids themselves, and it alllowed for the 'beginning' of these things. . . . The model shared the concept of responsibility.

Question 3 relates to stakeholders' perceptions of various school leadership levels in general within each level. Interviewees agreed that their perception of the governance level was negative, although Mr. Burger said that "it was better than it had been." The union level was perceived as positive by some, but ineffective by others. As Mr. Jay said, "Any union problem was resolved because of the model we had." Leadership from the parents was, as summed up by Mr. Duke, "zero. The only ones who participated were ambitious ones." The business and college collaborations were seen by Mr. Ken and Mr. Duke as self-serving, although Mr. Jay added that "business was always involved . . . and sincerely so." The leadership at the teacher level was perceived as "pretty good" by Mr. Burger and with mixed feelings by Mr. Duke.

Question 4 addresses stakeholder perceptions of leadership levels within the standing system in general. For Mr. Joseph and Mr. Burton, leadership was effective. Mr. Blue concurred, saying that the framework of leadership "spread authority out more." Miss Jessye qualified her perception that the idea "was basically a good one," by adding that sufficient support was lacking. "The leadership style was more style than substance," Mr. Adam said, and added that change "was still hard for a lot of people to get used to." Mr. Good noted that "it was a transitional team" and "the participative model was set to fail" due to the condition of the school.

Question 5 responses address stakeholders' evaluation of staff and of themselves. Most interviewees agreed that the staff was effective. As Mr. Blue said, "A lot of people were happy for the first full year.

People were given the sense that they were an integral part of the school and had something to contribute." Mr. Good perceived the structure of the school as a negative factor affecting teacher effectiveness. Mr. Purple pointed out the "general burn-out" from pressure over previous years. However, as Mr. Adam said:

> The staff of teachers were very close and protective of each other. . . . There was a bond that existed among them which was very strong and rare to find in urban high schools. . . . They were also argumentative and fought with each other like cats and dogs inside the building, but, if someone from outside came in and said something, they would unite.

Question 6 asked participants to differentiate between definitions of "participative management" and "participative leadership," and to express agreement or disagreement with these definitions. Mr. Ken, Mr. Jay, and Miss Betty accepted both definitions. Ms. Jippe elaborated:

> Participative management allowed me to have ownership and gave me a chance to introduce more commitment. . . . It allows for development and, ultimately, it produces a product that is both satisfying in the goal of an administrator to provide a worthwhile environment . . . a worthwhile product in the education of the students, and for career development.

Mr. Alley pointed out:

> The model has some deficits, but the deficit is not the deficit of hope. . . . It speaks to the fundamental nature of being a professional . . . to control the environment and not just be a victim of it passively. It can activate people.

Question 7 asked participants to determine if they perceived themselves or others to have been underemployed or underutilized during the period of the introduction of the STS/QWL paradigm at CHS and to comment on their answers regarding any implications and/or solutions. Most

respondents felt that they were neither underemployed nor underutilized during the study year. As Mr. Burger commented, "I can't recall another time, other than during the model year, where my . . . experience was utilized as much as it was then by the assistant headmaster." Mr. Joseph and Mr. Ken felt that "door duty" was underutilization, and that enrichment programs for students would have used teachers' talents to their fullest. As Miss Nancy pointed out when underemployment or underutilization existed, "I don't get the same sense of satisfaction in my job."

Question 8 attempted to determine participants' attitudes towards leadership and the acceptance of authority in light of their individual perspectives and experiences. Mr. Bird, Mr. Burger, Mr. Cooper, and Mr. Duke declared they do not accept leadership or authority unconditionally. Miss Jippe explained:

> I don't like the word 'surrender' in terms of my participative perspectives, but I could say I would compromise them if necessary. I believe in negotiated settlements. My democratic ideologies are inherent . . . not only in my value system, but also just in the concept of a free citizenship within the United States of America.

Mr. Ken said:

> It really is a question of authority. . . . I simply do what I am told even though I do not like it. I accept legitimate authority but resent the leadership.

Miss Betty agreed, adding:

> As an employee, I must follow orders. If I do not agree with them, there are steps I can take; but if I wish to remain an employee, I feel it is my duty to do what those above me decide upon.

Mr. Alley pointed out:

> The reason we have problems in governance in education is because of the kind of people we attract into education. We have an ingrained sense of belief in leadership and we are, by nature, conservative of innovation.

Question 9 asked participants to rate the effectiveness of autonomous teacher teams in a high participative management paradigm in terms of their offer to improve the quality of working life. Teacher teams were characterized as a way to improve "self-esteem" by Miss Edwards; "the wave of the future" by Mr. Jay; "the only way to go" by Miss Jessye; and "very positive" by Mr. Ken. Mr. Richard did not agree that teacher teams "really improve the quality of worklife for the staff." Mr. Purple elaborated:

> Any alternative education group works as long as they are given that separation of power and they can run their own show. . . . They would function with participative control and involvement in decision-making as long as they can accept the power given them without seeing it as an illusion.

Ms. Silver added:

> It all boils down to where we are working together towards a common goal, and, if you all know what that purpose is, then you feel good about being there, and, indirectly, you project more. . . . It would help and improve [the quality of education] as long as we all have the same philosophy or we all agree.

Question 10 asked stakeholders to indicate those work conditions and/or specific areas of need that should be addressed in the organization of an urban secondary school which would improve the quality of working life. The safety and security of the building was the primary need perceived by Mr. Burger, Mr. Patton, Mr. Richard, Mr. Joseph, along with discipline cited by Mr. Burger and Mr. Richard. Participation in budget areas including textbooks and supplies was specified by Mr. Joseph. Ms. Carter summed it up by saying:

> I do need to feel I belong to a group and that there is mutual support for people's tasks and a process of negotiated settlement within the group . . . that I matter and that the work I do is important and makes a difference. I would include safety and security on a high degree along with the physical environment of the workplace. . . . The cleanliness of the building would come before textbooks and supplies.

Question 11, atypical in interview questions, was an open-ended invitation for respondents to suggest additional questions for consideration and inclusion in the study. Miss Betty asked: "If you had your choice of putting this model into operation, would you remove people with whom you felt you would not be able to work, or would you keep them?"

To the response that no one would be removed simply because, as human beings, they would need to be developed, and that some test should be made to change conflict into cooperation and collaboration, she said, "It is like a religion. Once a person is converted, he becomes a supporter."

Mr. Adam presented a question that was included in the interview schedule: "What role does personality add or negate in promoting change or obstructing change? How do/did you evaluate the headmaster's personality in this exercise? How do/did you evaluate the program director's personality in this exercise? Why?"

In Miss Betty's words, "personalities certainly add to or negate in promoting change within any situation." Mr. Bob, Mr. Jay, Ms. Jippe, and Miss Nancy agreed. Mr. Duke, however, did not think personality was a factor. He said, "The schools are like a pendulum; they are set in motion, the personalities come and go, but the motion will continue."

Miss Silver added, "Sometimes when you are dealing with adults, you ignore personalities. I deal fairness more than the personality aspect of people."

CHAPTER 5

SUMMARY, CONCLUSION, RECOMMENDATION

Introduction

Chapter 5 presents a summary of the year of study (1982-1983), change experience results, and the findings of Chapter 4. This presentation is followed by a discussion of the weaknesses and the strengths of the study, the theoretical and practical implications of the results, and suggestions for future research. It concludes with the researcher's reflections.

The primary purpose of this study was (1) to identify the elements characterizing an improvement in the QWL for urban secondary school faculties, (2) to evaluate those characteristics used in the particular change strategy in 1982-1983 at a Boston urban secondary school, and (3) to reflect on the literature refining those characteristics defining the QWL for that urban secondary school environment.

The enumerated purposes of this study were accomplished by:

1. Evaluation of the STS/QWL paradigm characteristics previously presented in Chapters 2 and 3 as applied in the change strategy, comparison with the interview schedule response findings, and reflection on the literature.

2. Intersubjective sharing by stakeholder and researcher of meanings of the study year findings, summarized in Chapter 5, and comparisons with the findings reported in Chapter 4, which includes a discussion for each of the interview questions presented.

3. Reflection on the literature presented in Chapter 2.

Summary: Year of Change

Throughout numerous face-to-face informal interviews, conversations, correspondence, and reflective critical discourses, the impressions of stakeholders within and beyond their respective positions and roles supported the following year of study (1982-1983) results.

Many positive results emerged. These reflections represent a relationship among and between the STS/QWL discrete characteristics. Each result is reflective of the ten constructs in the STS/QWL paradigm and concept (Appendix H), and encapsulates the intrinsic properties of the job (Appendix E).

For many stakeholders, the following held true:

1. Joint optimization of the workplace and staff development provided the empowerment mechanism to improve the quality of working life. The LAC guidance system mechanism and reflective critical discourse became enablers.

2. The open system was recognized and identified as a humanizing system. They also realized that they were not being treated impersonally, but as respected and important contributors to the process of change.

3. The new work design acknowledged their social and psychological needs beyond the (extrinsic) contractual requirements of the workplace. This included a major voice in decision-making and implementation, resulting in mutually increased trust and respect at all levels.

4. Assuming new roles and tasks, some formerly the domains of upper level administrators, provided on-the-job training, role modeling, experiencing new perspectives in organization and administration, and a new dignity.

5. Cohesion evolved into self-regulating groups, increasing efficiency and productive involvement when individuals were empowered to carry out responsibilities in job roles according to their own decisions. The single CHS program united in a semblance motivated autonomy out of the effort. This was later to be curtailed by the contaminants.

6. From the flatter organization, participative style, and minimum critical specifications, additional positive results evolved. Satisfaction and morale increased. Stakeholders, former recipients of directives, became initiators, problem-solvers, learners, and role models. Many became openly assertive in a constructive and collegial sense, raising issues at any level. The information, participation, feedback (IPF) loop was a positive link.

7. Cooperation and collaboration became a reality as negotiated settlement, consensus, and reflective critical discourse began their initial institutionalization. Stakeholders became problem-solvers more than problem sources.

8. The new dignity resulting from the involvement in managerial role tasks increased recognition, trust, and respect levels among and between stakeholders. This positive effect was productive for both the stakeholder's and the school's purposes.

9. Empowerment and involvement in activities between and among other stakeholders created a new understanding that the school belonged

to them in reality, not just in rhetoric.

10. The new-found involvement and ownership produced several initiatives and innovations, whose success or failure could not be predicted. Some succeeded, some failed--in a climate that accommodated both.

The evaluative knowledge that measured the positive observations also confirmed the negative observations which include:

1. The most prominent and unexpected was the intrusion of the contaminants. Although they had worthwhile goals, the effects were negative in:

a. preventing institutionalization and diffusion of the new work design by introducing confusion about institutional goals and directions;

b. affecting stakeholder perceptions, inhibiting acceptance and evaluation of the planned design because of fear resulting from the tentative administrative structure;

c. becoming a divisive force in the stakeholder cohort as groups vied for control; and

d. requiring, ironically, the professional support of the headmaster, researcher, and numerous involved stakeholders.

2. Envy, as noted by Trist (1981) and supported through formal interviews, became apparent.

3. Several issues of sabotage or mutiny were raised by selected stakeholders. Many indicated that a problem existed in the lack of active support from administrative stakeholders.

4. Communications regarding the new work design were impaired so as not to "compete" professionally with the contaminants.

5. Limited communications did not preclude, for those stakeholders who comprehended the course events were taking, voicing resistance and mutiny--both emphatically rejected by the existing administration.

6. Stakeholders at various levels withdrew who approved of the change mechanism but, in the midst of competing programs, had to think of personal survival.

7. The "sinking ship" effect was implicit when many stakeholders advanced counterproductive positions toward the headmaster and the new work form when assessing that the central office initiatives would prevail over the alternative paradigm and stakeholder initiators.

8. In the headmaster, perceptions of a take-command leadership role in the traditional sense compared to the new role of resource diagnostician, sharing power was construed as a sign of weakness. Criticisms included:

a. The headmaster was perceived to be not tending to management chores, from which he had been relieved by the researcher and other stakeholders.

b. Stakeholders wanted to see the headmaster perform his "assigned task."

c. Some interviewees commented that the researcher "was doing the headmaster's job."

d. Few stakeholders differentiated between leadership and management.

9. The technocratic bureaucracy's regard for human beings and well-being as replaceable and interchangeable parts was confirmed.

10. The technocratic bureaucracy predicates participation, leadership, trust, respect, ownership, involvement, risk-taking, and democratic ideals. The reality is the opposite. We are apparently interested in internecine warfare, not in working with stakeholders nor, especially, in the children.

11. The school-by-school change is delimited to the broad system structure's compliance without sanction from the school committee or the courts. Change is (in reality, is forced to be) piecemeal, extinguishable by a superior power.

Stakeholders' attitudes of trust and respect as the open climate made its way into the culture of the school improved. More significantly, the extent to which many stakeholders disclosed innermost sensitivities about the circumstance of teaching, the school situation, and personal problems were expressed. Many veteran teachers expressed both invited and uninvited criticisms. Trust and respect levels were perceptually so high that reminders had to be repeated that the researcher's role could be terminated at will by the central office, and that the researcher, in reality, had little power. The power he did have did not extend beyond his current role. Stakeholders' revelations were perceived as self-motivated agendas. This perception changed with reflection and intuitive acceptance that they needed more than management to listen to them. In reality, they needed a cohort to share their concerns, who shared their positions, sincerity, and confidentiality, and, one who could help them. This type of experience was encountered at SBHS during the early busing years and had been constantly experienced in the private sector. However, it was not expected at CHS, considering the high-powered assertive nature

of the collective stakeholder colleagues. This surprising observation gives rise to self-reflection as to what could have been changed to have had better results had the transformative project been ongoing for five years.

If duplication of the project were attempted for the researcher, the most important change would be that the contaminants be absent. It is debatable if a one-year planning period would have served a need or if it would have created another set of problems. Although a one-year planning period was specifically excluded, it was mentioned as a "normal" way to bring about the anticipated change. The researcher's sense is that the immersion process was appropriate to the contextual turbulence and one which had existed since 1974. If adaptation level theory was applied, it could be argued that the stakeholders' acceptance of turbulence was a common occurrence. The ideal was not available or achievable.

The principle challenge was to effect a change mechanism within a system with an existing stakeholder cohort, attempting a deprogramming of the technocratic model whenever possible and to reach the consensus. This would have been the true humanized test to the STS/QWL paradigm and of its sponsors. Given the circumstances of CHS, the STS/QWL not only showed promise of working, but, in fact, it did work.

Although there may be other changes that could be desirable to some, an important change would have been to have been relieved of the state-regulated population. The test is the ability to deal with the problem. This, however, requires the power to act. The desirable change would have been to have had sanctioning without interference at the highest levels of governance. Then again, perhaps the change might not have

worked. All participants and stakeholders should have shared in the change process.

We are professionals. There is no mystical transformation that takes place where one person becomes a leader. This is a technocratic, factorized, reductionist view. If practitioners are dealing with human beings, they must treat them as such. The results would take the nation closer to revitalizing the public education framework in America.

Summary Findings

A graphic summary supporting the ten STS/QWL characteristics is shown in Figure 4.3 (p. 176). The explanation of the low showing of the tenth element is that most respondents thought of innovation as routine in daily survival and implicit and evident in the previous nine elements; it was reflected in responses to subsequent questions as viable. Remaining questions, although open-ended, had specific foci. Further distillation of the STS/QWL paradigm elements became ancillary so that academic integrity could be established.

The overall approval of hermeneutics and reflective critical discourse as an effective mechanism to evaluate intersubjective meaning complexes and understanding of stakeholder reasons and motivations is displayed in Figure 4.9 (p. 185), which is based on answers to Question 2. This evaluative mechanism is appropriate for STS/QWL measurement.

A summary of the answers to Question 3, which predictably favors the union and the teachers' roles in providing educational leadership,

is displayed in Figure 4.12 (p. 189). For many, the perception is that teachers provide the strength of the workplace. Outsiders cannot know what the true pain of the inside is.

A summary of stakeholders' satisfactions with leaders in the leadership structure, based on answers to Question 4, is shown in Figure 4.13 (p. 191). This question is open-ended, and required some structuring to evaluate the leadership structure as a whole rather than in discrete parts as many stakeholders desired.

An interesting comparison showing that stakeholders have lower esteem for some of their colleagues than for themselves, based on answers to Question 5, is displayed in Figures 4.17 (p. 196) and 4.18 (p. 197). In this question, evaluation was restricted to the colleague cohort rather than an analytical characterization by individual(s) or groups.

The overwhelming endorsement by stakeholders for the alternative management system, based on answers to Questions 6 and 9, is shown in Figures 4.21 (p. 201) and 4.30 (p. 213). This puts into question why the new mechanism was not used more and why the stakeholders did not offer emphatic support to retain the new work form. This answer is presented in Chapters 4 and 5 among the study year obstacles and summary of negative observations.

An unanticipated situation based on answers to Question 7 is presented in Figure 4.23 (p. 204). The question focused on the study year. Responding stakeholders made comparisons of the year of study with pre- and post-years, requiring that the interview be constantly refocused. Responses to the refocusing effort do not record on paper the persistent tone and/or nuances of stakeholder reflections on those years.

Independent analysis could not evaluate these expressions.

The importance of stakeholder acceptance of leadership and authority and their willingness to surrender or not their democratic ideology, based on answers to Question 8, is shown in Figures 4.26 (p. 208) and 4.27 (p. 209). Acceptance of leadership and authority is evident. It is the overwhelming refusal to surrender or compromise democratic ideology or participative principles that is most evident. It is here that everyone is capable of making evaluative judgments of leadership. Their agenda presents democratic ideals or another condescending gratuitous exercise foreshadowing a breakdown of workplace requirements and professional staff development. If there was success to be measured in the study year, it can be attributed in large measure to allowing these democratic ideals to flourish.

A summary of critical issues showing that four elements were favored among the several presented, based on answers to Question 10, is shown in Figure 4.33 (p. 217). The interview question attempted to specifically exclude references to the ten STS/QWL elements. The open-ended nature of the interviews generated some of those responses. Noteworthy is the respondent's perception that a safe, secure, and clean environment is needed as a precondition for effective teaching and learning. Textbooks and supplies are great to have, but can be ineffectively utilized in a negative environment.

A summary of the stakeholders' positive and negative reflections on the headmaster and researcher, based on answers to Question 11, is shown in Figures 4.34 (p. 218) and 4.35 (p. 220). The questions were presented by stakeholders, for inclusion, in the earlier stages of the interview

process and included for succeeding interviews. Including these questions was part of the sharing principle, giving the stakeholders an additional role in this study. The single importance of the positive responses exceeding the negative reflects an evaluation of the program initiators. In the attempt to introduce an STS/QWL program, this places the onus on the initiators as communicators. Acceptance of the new work design depends on communication and institutionalization. Much of the time was spent in being a nonexpert, a learner, a listener, and proving that the new work design and its initiators valued the human being.

The answers to the questions are summarized as follows:

1. "Which change processes and STS/QWL design features work?"

   Answer: They all worked, as reflected in the findings.

2. "Which did not work?"

   Answer: None standing alone could be faulted since the STS/QWL paradigm deals with a system of relationships and interdependencies.

3. "Which showed promise at working?"

   Answer: They all showed promise of working.

4. "What were the reasons for the underlying successes or deficits?"

   Answer: The response to the first and third questions indicated the genuine inclusion of all stakeholders; the attempt to share the same goals; treatment of stakeholders as professional coequals; utilization of all of their strengths; the recognition of their social and psychological needs, which released enormous amounts of energy and talent, reducing stress; use of the neutral self-guidance system LAC; use of the hermeneutic approach in reflective, critical discourse; the contribution

of all toward improving the quality of working life. Response to the second question is that the overwhelming force of the central office and its contaminating initiatives inhibited participation as well as communication, which would conflict.

The alternative paradigm reflected an open system. The initiatives ostensibly predicated the open system's positive features but failed to convince the general stakeholder cohort. Another deficit can be attributed certainly to mid- and upper-level administrators. Lacking central office sanction proved to be the end deficit.

When correlating the summary of study year experience, the interview findings, and the literature, the conclusion is that the STS/QWL paradigm, when genuinely applied, does offer to improve the quality of working life. However, there are some limitations to consider in the results. Many of the involved stakeholders were no longer working at CHS. They had retired or moved, and no direct or indirect communication was available. Some involved stakeholders declined to participate in the interviews, and some failed to acknowledge the invitation to participate. It was another form of declining. In the ideal sense, those involved stakeholders could have added or detracted from the results obtained.

Another limitation is presented. The follow-up interviews were conducted five years after the study years. Ideally, the study should have gone on and been measured for five years.

The contaminants present another major limitation. This presence precluded a "purer" measurement, having had an inhibiting effect during the year of the study. Because of the "continued presence" of the contaminants in subsequent years, the formerly involved stakeholders who

were respondents possibly remain affected and biased, as pointed out in the previously cited limitation.

The researcher's position as assistant headmaster may have led to biased responses. However, it is questionable whether or not an independent interviewer could have elicited the uninhibited responses.

Fourteen conclusions have been drawn:

1. The STS/QWL paradigm, offering a genuine shared management philosophy, evidenced that the stakeholders were untapped human resources who, when given the opportunity, demonstrated the positive characteristic elements with their professional performance.

2. The STS/QWL paradigm recognized the effectiveness of group dynamics and psychology as a powerful resource.

3. The STS/QWL paradigm embraces a philosophy of inclusion in reality. It requires fewer management layers recognizing the efficacy of autonomous groups and self-supervision in the cybernetic sense (Weiner, 1950).

4. The STS/QWL paradigm values and philosophy lend themselves to conflict resolution, negotiated order, and consensus-building through hermeneutic policy analysis and reflective critical discourse with the underlying basic assumption that all parties are speaking with unity of purpose.

5. The STS/QWL paradigm addresses the issue of equality within the principle of joint optimization. Delegation and shared decision-making lend themselves to democratization as a philosophy of inclusion rather than exclusion.

6. The STS/QWL paradigm characteristic elements, when applied as a total system change in their purer form, evidence: remarkable improvement initiatives between and among stakeholders; increased positive levels of trust, respect, satisfaction, morale, performance, task ownership, innovation, and risk-taking in an intra- and entrepreneurial climate that allows for success and failure.

7. The STS/QWL principle of joint optimization not only recognizes the focus on human well-being, but also becomes the leading element in the development of human beings as capable learners and teachers through a continuous cycle of sharing resulting in maximized heights of cooperation and collaboration and in reduced conflict.

8. The STS/QWL paradigm offers a total system change where employees are allowed to gain a comprehensive knowledge base of their total organizational system and how they function within it. Competition and conflict are replaced by mutually shared goals.

9. The STS/QWL concept blends the perceptions of both social scientists and qualitative engineers into a jointly optimized system recognizing the relationships and interdependencies of the workplace and human beings working there. It creates a positive atmosphere and climate where those who want to work and innovate can do so. Those who simply want to work can do so. Those who opt for neither can exercise choices for alternative available options or exit.

10. The psycho-social approach represents a familiar area of practice for educators. This is an area with which educators are very familiar in both the formal sense of training and higher education preparation.

11. The psycho-social approach represents the better construct in meeting the needs of the workplace and staff development in an alternative paradigm such as STS/QWL, as supported by the evidence presented in Chapter 4.

12. The psycho-social approach to urban secondary school management represents the first step in attempting to correlate a natural fit for human beings to effect positive change in the quality of working life in the system.

13. The psycho-social approach suggests that it is important to develop an adaptive and flexible social communication medium through which divergent groups can reach a consensual agreement or genuine shared goals.

14. The psycho-social approach, in summary, optimizes the individual's need for adequate space in making decisions about his work; for self-regulation in providing opportunities for variety; to become involved at many levels and positions earning his colleague's support and respect; to have multiple opportunities for self-development; to work and to acquire a sense that his work has social acceptance and importance; and, finally, for a sense that there is a future to look forward to, not necessarily a promotion.

In support of these conclusions, the research indicates there were no easily identifiable inadequacies in the STS/QWL concept. Only the circumstances of the contaminants and their sponsors were indicated as negative elements and inhibitors to total implementation, diffusion, and dissemination.

Implications for Practice

Chapter 2 reviewed several bodies of literature because there is a paucity of literature specific to STS/QWL in the urban secondary school. Reviewed was selected literature including the circumstance surrounding the evolution of the educational system; leadership perspectives; examined theories, research findings, and perceptions applying to business and education; participative decision-making research perspectives. A review of selected models and systems concluded with the STS/QWL concept as an alternative paradigm. The literature deals with a specific focus exempting a system restructuring and continuing to relate within a traditional organization framework.

Most of the educational literature neglected to research educational change as a relationship between the school as a workplace and the teacher as a human being with social and psychological needs. Researchers addressed specific aspects within each dimension. These qualify as approaches toward STS/QWL and relate to one or more of the findings.

Exposing the symptomatic problems of education with the factorized, corporate superimposed image in education has been described by Bowles and Gintis (1976) and Tyack (1974).

In piecemeal measures, Yukl (1982) examined the major theories of leadership researchers. These are trait approaches, power influence approaches, and behavior approaches. Lawrie (1970) reconceptualized leadership as a myth, pointing out the need for a relationship between the goals of the organization and the social and psychological needs of the teacher. These address STS/QWL values and assumptions. Alutto and

Belasco (1973), Pitkoff (1975), and Conway (1976) find that schools need increased teacher involvement.

Job satisfaction by increased participation decision-making is related by Finch (1978), Hewiston (1978), and Yarborough (1976).

The importance of the decision is a significant factor in participation according to Pitkoff (1981); Bartunek (1979); and Gips and Bredeson (1984).

Productivity as a desired outcome is related to teacher training in enhancing participative skills by Bartunek (1979); Schmuck and Blumberg (1969); and Finch (1928).

Imber and Duke (1984) argued that research challenges the high frequency of teacher participation findings of theoretical studies and that more empirical studies are needed.

In school models and systems, English (1975) suggested that the humanistic value system involving other groups is best suited to deal with conflict, producing a school that is open and effective with students.

School-based management (SBM) offers the involvement of the school-based community in a "bottom up" process. The mechanism is appointed, school-based committees (Marburger, 1985). Herrick (1985c) added the concept of the parallel organization that would be representative of all the school partners.

Crockenberg and Clark, Jr. (1979) found that areas of conflict are always present, but that school effectiveness can be enhanced by teacher participation.

The effective schools model (Edmonds, 1979) is suggested as a secondary school model (Neufeld, Farrar, and Miles, 1983). However, they found little research to support their claim. Purkey and Smith (1985) argued that the importance of participation in decision-making at the school level was not characteristic of a successful school, although it was important in the research of change implementation. Pratzner and Russell (1984) suggested that the effective schools model is in position to encapsulate the QWL approach in secondary school vocational education programs. In the alternatives, Fantini (1973) and Barkhurst and Wolf, Jr. (1979) offered to encapsulate most of the approaches of the STS/QWL paradigm.

The reformation of American public school education has tended to increase controls and piecemeal modifications as solutions to current problems (Backarach and Conley, 1986).

Wirth (1983) takes the position that the American landscape is littered with outdated models and offered the democratic socio-technical system as a total system addressing the joint optimization of workplace needs and staff development. This position was also embraced by Herrick (1985b).

The Governors' 1991 Report on Education (1986) and the Carnegie Forum on Education and the Economy (1986) argued for restructuring and teacher empowerment embracing most of the STS/QWL concept.

Evaluation of STS/QWL as a "commonsense" approach was argued by Emery (1982). The hermeneutic and reflective critical discourse as a viable STS/QWL evaluative mechanism was supported by Farley et al. (1985).

Study year findings supporting the efficacy of the network coincide with Kanter (1984) and Naisbitt (1982), as well as with STS/QWL (Trist, 1981).

Kanter (1984) and Naisbitt (1982) presented the network as a powerful mechanism. Study year findings support their arguments as well as STS/QWL literature (Trist, 1981).

Kanter (1984) argued the efficacy of team options in integrative companies. This study supported group autonomy and the STS/QWL building block of self-regulating groups (Trist, 1981).

Rosow (1981) reflected his research in his testimony concerning American leadership failure. This study reveals a healthy disrespect for leadership as reflected in the findings. These findings are supported in similar research by Pratzner and Russell(1984) and Ferguson (1980).

Concern with underemployment and underutilization is revealed in this study. Pratzner and Russell (1984) and O'Toole (1975) presented similar concerns. Study findings are supported by STS/QWL literature (Trist, 1981; Van Beinum, 1986).

Findings related to the high participative mode and the ideology of democracy relate to similar findings in Ferguson (1980), Naisbitt (1982), and Peters and Waterman (1984). Study findings were supported by STS/QWL literature.

Study findings regarding STS constructs coincide with the STS/QWL concept (Trist, 1981; Emery, 1978a; Van Beinum, 1986).

Study findings support approaches to QWL found in Peters and Waterman (1982), DeVille (1984), and Geneen and Mascow (1984). These approaches tend to be management values to commitment, increased output,

and company growth. QWL represents more than these management values. QWL is a democratization process sharing workplace responsibility and authority at or between levels in a mutually recognizable climate of trust, respect, and human dignity. "Excellence" enhancements fail to recognize the social and psychological needs of employees. This study found the significance of STS/QWL concept and paradigm.

The results of this study offer a view of the STS/QWL alternative paradigm that worked in a turbulent environment compounded by the turbulence of central office contaminants, achieving successes in spite of it all. Results of this study suggest an important breakthrough in school restructuring with a high-employee involvement paradigm.

This study suggests the need for continued research. Democracy cannot be given away. It has to be understood within a common context with all its complexities. It has to be intersubjectively shared. It has to be learned. It has to be earned. It has to be protected. It has to be compassionate. It has to be painful. It has to lead to thought. It has to generate wisdom. It has to make life bearable. Then it becomes a self-fulfilling ideology. When it is lost, it is mourned.

Recommendation

There exists a need for a common discourse medium, a new way of talking to each other that is mutually respectful and acceptable by all divergent groups. Whether it is a union, a teachers' association, or an organization by any name, individuals such as teachers or administrators should band together, if for no other reason than community of interest

or informal association. Groups will necessitate recognition as partners, not adversaries. Employee groups are not at fault for failure; leadership is.

The STS/QWL paradigm, including hermeneutic and reflective critical discourse, offers to provide that framework. We would then be spending more time attempting to accommodate the opposite point of view and improve the quality of working life.

Implications for Future Research

Given the limitations of the case study approach used in this dissertation, which describes the application and implementation of a particular paradigm--the Socio-Technical System of Management and Participation--as a vehicle for improving the quality of working life for the faculty of a particular secondary school in Boston, a myriad of areas exist that bear further research and evaluation. These are made necessary to validate and confirm the application of the study to other secondary urban schools and public schools in general.

These limitations have been described, but the major elements include its focus on an urban secondary school undergoing a desegregation process and upheaval that dramatically affected all aspects of education, politics, demographics, and sense of "mission" for all institutions in Boston, and particularly for the teachers, students, and schools.

Comparable studies should be conducted in other secondary urban schools with similar or vastly different histories, backgrounds, and conditions. A school that was not in such a disruptive sociological

environment, or perhaps schools undergoing a voluntary and peaceful change efforts, would be particularly important in a comparison of findings. Application and implementation of the paradigm at a number of suburban secondary schools would give more validity to the effort to evaluate those characteristics that show promise for the improvement of the quality of working life for faculties.

The participative management models and self-regulating autonomous work groups suggested as the most important elements of this study are particularly intriguing. A number of efforts now being established and implemented across the country--particularly one in the Dade County (Florida) Public Schools, and the Rochester (New York) Public School System, where the principles have been introduced cooperatively and with a great deal of reported success--would be most important to pursue in the future, and would perhaps provide much needed information on the viability and universality of STS/QWL and humanistic principles for American education.

The general differences and characteristics that define the various organizations, traditional roles, focus, hierarchies, and emphases between secondary and primary schools is also a fertile and important area for further investigation. Certainly, the differences between highly unionized faculties on an urban secondary level and those in less organized and/or more flexible situations would have an effect on any attempt to introduce what is basically an industrially centered model into the educational scene. This study suggests that, in this case, it may not necessarily be as important a factor as in other models that have been tried in the past, that it may have universal applications for how

schools work or might work--or should work.

More mundanely, are the case study approach and the methods of research employed here the most effective vehicles for obtaining specific information about the implementation and evaluation of STS/QWL principles in an educational setting? How does one measure the success of a paradigm that is an open-ended, humanistic process, while not interrupting or interfering with the openness and flexibility that it intends to engender in all its stakeholders?

This study reports little or no appreciable difference between the perceptions of stakeholders about the importance of various characteristics to STS/QWL implications between the year of its implementation at CHS and the study year. Would this be true in ten years? Twenty? Under what conditions might they change?

The Socio-Technical Systems/Quality of Working Life, as it applies to American education, deserves more study because, as this researcher suggests, it may contain the elements of a system that can revitalize and refocus the efforts of educators in the nation's public schools.

Researcher's Reflections

Of the numerous issues and questions that evolved from each given situation, perhaps the more fundamental questions for the person(s) attempting to guide an STS/QWL paradigm change is to consider: How do I go about initiating or guiding a paradigm change? How do I deal with the existing stakeholder, the informal organization, and their interests? What could the new structure look like? What circumstances

fit this organization to encourage participation? What type of people would be best in helping? How best can the program move through the several stages from appreciation to institutionalization and diffusion? Are preliminary judgments of people involved accurate predictions of help or dissonance? Am I prepared to guide an alternative paradigm change? How can the obstacles be dealt with fairly--if at all? How do I deal with painful emotional issues over which I have no control?

The principal role of the researcher in this study was that of participant as observer. The roles assumed allowed a balance between participation and observation. The initial implementatin period settled into a routine situation, as most situations usually do. This period offered numerous occasions for observation and attempting to categorically fit human actions and motivations into the discrete constructs of the STS/QWL paradigm.

For the participant and observer, the insights and nuances of human action provided many opportunities to attempt to find meanings for some of the reasons for all human actions. These meanings were very often shared with stakeholders from a learner's perspective, resulting in shared meanings and increased levels of respect. These interactions very often changed previously documented notes and mental reservations, and created new mental characterizations of the character and value system of the observed stakeholder(s) generating these perceptions.

To reflect back on the year of the study, it is still saddening that we began in turbulence; we were developing a positive change, but the ultimate conditions resulted in more devastating turbulence in human terms than we found. The causes were uncontrollable. Reflecting on the

follow-up interviews, the pain exhibited by some of the stakeholders still exists. However, the researcher's notion remains that this "problem faculty and school" was benefiting from the paradigm change. The "problem faculty" phenomenally made discrete judgments of the sincerity of the high participative paradigm change strategy and its initiators--although many did not recognize it as such at the time--and participated. Many of those who had to "withdraw" gave subtle help and encouragement to those of us involved. There was tacit, mutual understanding of the inevitable.

As a learner, the researcher continued to learn; as a teacher among teachers, the researcher remained a learner who rode on the shoulders of giants in writing this dissertation.

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APPENDIX A:

GENERAL MOTORS (GM) - UNITED AUTO WORKERS (UAW)
LETTER OF AGREEMENT

THE LETTER OF AGREEMENT BETWEEN THE UNITED AUTO WORKERS (UAW) AND GENERAL MOTORS (GM) TO ESTABLISH A COMMITTEE TO IMPROVE THE QUALITY OF WORK LIFE

In discussions prior to the opening of the current negotiations for a new collective bargaining agreement, General Motors Corporation and the United Auto Workers (UAW) gave recognition to the desirability of mutual effort to improve the quality of work life for employees. In consultation with union representatives, certain projects have been undertaken by management in the field of organizational development involving the participation of represented employees. These and other projects and experiments that may be undertaken in the future are designed to improve the quality of work life, thereby advantaging the worker by making work a more satisfying experience, advantaging the corporation by leading to a reduction in employee absenteeism and turnover, and advantaging the consumer through improvement in the quality of the products manufactured.

As a result of these earlier discussions and further discussions during the course of the current negotiations for a new collective bargaining agreement, the parties have decided that a Committee to Improve the Quality of Work Life composed of representatives of the International Union and General Motors will be established at the national level.

This committee will meet periodically and have responsibility for:

1. Reviewing and evaluating programs of the corporation that involve improving the work environment of employees represented by the UAW.

2. Developing experiments and projects in this area.

3. Maintaining records of its meetings, deliberations, and all experiments and evaluations it conducts.

4. Making reports to the corporation and the union on the results of its activities.

5. Arranging for any outside counseling that it feels is necessary or desirable with the expenses thereof to be shared equally by the corporation and the union.

The corporation agrees to request and encourage its plant managements to cooperate in the conduct of such experiments and projects and recognizes that cooperation by its plant floor supervision is essential to success of this program.

The Union agrees to request and encourage its members and their local union representatives to cooperate in such experiments and projects and recognizes that the benefits that can flow to employees as a result of successful experimentation is dependent on the cooperation and participation of those employees and the local union representatives.

Note: From GM Quality of Work Life Efforts: An interview with Howard C. Carlson, July-August, 1978, Personnel (p. 15).

APPENDIX B:

IDEOLOGICAL DEFINITIONS OF THE QUALITY OF WORKING LIFE (QWL)

IDEOLOGICAL DEFINITIONS OF THE QUALITY OF WORKING LIFE

These definitions reach for a set of ideals which are an integral part of the process and environment for creating a highly effective and productive organization. Many of the quality of working life categories are merely the opposite side of the productivity coin. Neither productivity nor quality of working life goals can be engraved on a two-headed coin. In fact, the coin of an effective harmonious organization must bear the stamp of both goals so that whether you flip tails or heads, everyone plays and everyone wins.

1. Adequate and fair pay. Equal pay for equal work and fair and equitable pay relationships. Pay which is linked to responsibility and which recognizes and rewards service, skill, performance and individual accomplishment. Pay which is internally consistent between occupations and across organization lines. Pay which is competitive with the external labor market of the community and the industry and is responsive to prevailing practices and changing economic conditions. Pay which is responsive to the dynamics of high inflation and the necessity for maintaining economic incentives to work.

2. Benefits program. Provision of an adequate and competitive package of employee benefits which reflects prevailing practice. A benefits program which protects the employee and his family against illness, accidents, old age and death--integrated with state laws. Leisure time for rest, recreation and self-renewal through adequate holidays, vacations and opportunities for educational leave.

3. A safe and healthy environment. Working conditions which are

clean, reasonably safe and do not unduly endanger the health or safety of the worker or his family. An environment which meets all minimum national standards and is also responsive to its own unique conditions relative to dangerous chemicals, materials, equipment and work conditions so as to minimize risk to every individual worker.

4. Job security. An employment which provides for continuity so that the employee is reasonably secure about the future. Recognition of past service and performance with formal rules and policies regarding retention, layoffs, recalls and removals. A set of policies and practices which do not place the entire burden and costs of change on the individual worker. Opportunities for retraining, reassignment and transfer in lieu of separation. Early warning systems to alert employee [sic] to economic changes in the organization with advance notification and severance pay graduated with service. Early pension vesting and pension portability are critical factors in long term economic security for employees facing relocation and to assure manpower flexibility.

5. Free collective bargaining. The right of all employees to organize in unions, professional associations, other organizations which have the role of representing employees as a group or a profession. This right should apply equally to all.

6. Growth and development. Personnel systems and managers and supervisors who consider the individual employee as a growing, developing human asset. Employees may compete for training, development, recognition and promotion. Career paths providing for upward mobility and professional growth and advancement. Work assignments which are diverse, varied and challenging so as to expand skills, abilities and knowledge.

Programs to prevent skill obsolescence and to provide normal facilities for self-renewal and learning on the job to keep the employee in pace with the organization. Work assignments which have a positive effect on self-esteem, involvement and motivation.

7. Social integration. A workplace ambiance where the employee enjoys a feeling of belonging and being a meaningful part of the group, the department and the whole organization. A climate which encourages openness, a sense of community, freedom from prejudice, and personal equality irrespective of rank in the hierarchy. An organization which encourages teamwork and group cooperation within and across organization units. The workplace is emerging as a more important social force since about one-third of American workers live as single persons and experience considerable loneliness.

8. Participation. Linkage of employee participation to the productive goals of the enterprise. The recognition of individual creativity, initiative and talent so as to open the channels of communication and to encourage the free and easy flow of ideas throughout the organization. To reward participation, to respond to ideas and to explain decisions which reject ideas. Thus participation becomes a self-perpetuating force which open [sic] employees to new ideas and opens the organization to the ideas of its employees.

9. Democracy at work. Recognizing that the modern organization is a total society in microcosm, employees deserve rights and privileges compatible with their voluntary membership in the organization. This includes the right to free speech, the right to privacy, the right to dissent, the right to fair and equitable treatment and the right to due

process in all work-related activities. There is a growing movement toward "employee constitutionalism" [sic]. The workplace requires an executive, legislative and judicial system administered by appointed officials which is compatible with the rights of free men and women living in a democratic society. (See David Ewing's "Freedom Inside the Organization," E.P. Dutton.)

10. Total life style. Work should be a balanced part of the entire contemporary lifestyle [sic]. Work schedules, travel demands, career pressures and overtime should operate within a reasonable balance with the needs and responsibilities for family, leisure, recreation and self-renewal. Career advancement and development requiring frequent or repeated geographical moves can disrupt family and personal stability. The workplace interacts with its own employees, their families, the community and society--it should do so as a positive force for itself and the other people and institutions which it affects.

As organizations direct their policies to the achievement of such improvements for their employees, they are also bolstering the level of employee productivity.

Whether we look at capital intensive industries or labor intensive industries, we always come face-to-face with the "human equation in productivity" [sic]. The effort to advance the quality of working life means: greater self-esteem for individuals and for groups; increased and reinforcing involvement on the job; stronger ties to the work group and to the organization; and personal dignity. These translate to advances in productivity for individuals and groups since they bring human values to the workplace which accentuate positive performance

on the job.

Note: From Government Cost Reduction Act: Hearings before the Sub-Committee on Civil Service of the Committee on Post Office and Civil Service. House of Representatives, 97th Congress; HR 3116, p. 26.

APPENDIX C:

PRINCIPLES OF SOCIO-TECHNICAL SYSTEMS (STS) CONCEPTS

PRINCIPLES OF SOCIO-TECHNICAL SYSTEMS (STS) CONCEPTS

Some of the principles of Socio-Technical Systems (STS) concepts were:

1. The work system, which comprised a set of activities that made up a functioning whole, now became the basic unit rather than the single jobs into which it was decomposable.

2. Correspondingly, the work group became central rather than the individual job-holder.

3. Internal regulation of the system by the group was thus rendered possible rather than the external regulation of individuals by supervisors.

4. A design principle based on the redundancy of functions rather than the redundancy of parts (Emery, 1967) characterized the underlying organizational philosophy which tended to develop multiple skills in the individual and immensely increase the response repertoire of the group.

5. This principle valued the discretionary rather than the prescribed part of work roles (Jaques, 1956).

6. It treated the individual as complementary to the machine rather than as an extension of it (Jordan, 1963).

7. It was variety-increasing for both the individual and the organization rather than variety decreasing in the bureaucratic mode.

Note: From The Evolution of Socio-Technical Systems: A Conceptual Framework and an Action Research Program (p. 9) by E. Trist, 1981, Ontario Quality of Working Life Centre, Ontario, Canada.

APPENDIX D:

SOCIO-TECHNICAL SYSTEMS (STS) BUILDING BLOCKS

SOCIO-TECHNICAL SYSTEMS (STS) BUILDING BLOCKS

1. Primary work systems. These are the systems which carry out the set of activities involved in an identifiable and bounded subsystem of a whole organization--such as a line department or service unit (cf. Miller, 1959). They may consist of a single face-to-face group or a number of such groups together with support and specialist personnel and representatives of management plus the relevant equipment and other resources. They have a recognized purpose which unifies the people and the activities.

2. Whole organization systems. At one limit, these would be plants or equivalent self-standing workplaces. At the other, they would be entire corporations or public agencies. They persist by maintaining a steady state with their environment.

3. Macrosocial systems. Macrosocial systems include systems in communities and industrial sectors and institutions operating at the overall level of a society. They constitute what I have called "domains" (Trist, 1976a, 1979a). One may regard media as socio-technical systems. McLuhan (1964) has shown that the technical character of different media has far-reaching effects on users. The same applies to architectural forms and the infrastructure of the built-environment. Although these are not organizations, they are socio-technical phenomena. They are media in Heider's (1942) as well as McLuhan's sense.

Note: From The Evolution of Socio-Technical Systems: A Conceptual Framework and an Action Research Program (p. 11) by E. Trist, Ontario Quality of Working Life Centre, Ontario, Canada.

APPENDIX E:

INTRINSIC NEEDS

INTRINSIC NEEDS

The need:

1. For the content of a job to be reasonably demanding in terms other than sheer endurance and to provide some variety (not necessarily novelty).

2. To be able to learn on the job and go on learning. Again, it is a question of neither too much nor too little.

3. For an area of decision-making that the individual can call his or her own.

4. For a certain degree of social support and recognition in the workplace for the value of what the individual does.

5. To be able to relate what the individual does and what he or she produces to social life, and for it to have meaning and to afford dignity.

6. To feel that the job leads to some sort of desirable future (not necessarily promotion).

These intrinsic requirements are not confined to any one level of employment. It is not possible to meet them in the same way in all work settings or for all kinds of people. They cannot always be judged from conscious expression. When there is no expectation that any of the available jobs will offer much chance of learning, a person will soon learn to "forget" such a requirement.

Note: From The Evolution of Socio-Technical Systems: A Conceptual Framework and an Action Research Program (p. 29) by E. Trist, Ontario Quality of Working Life Centre, Ontario, Canada.

APPENDIX F:

PROPERTIES OF JOBS

PROPERTIES OF JOBS

EXTRINSIC	INTRINSIC
Fair and adequate pay	Variety and challenge
Job security	Continuous learning
Benefits	Discretion, autonomy
Safety	Recognition and support
Health	Meaningful social contribution
Due process	Desirable future
Conditions of employment:	The job itself:
Socio-economic	Psycho-social

Note: From The Evolution of Socio-Technical Systems: A Conceptual Framework and an Action Research Program (p. 30) by E. Trist, Ontario Quality of Working Life Centre, Ontario, Canada.

APPENDIX G:

PRINCIPLES OF WORK DESIGN

PRINCIPLES OF WORK DESIGN

The following nine-step model derives from the second field experiment of the Norwegian Industrial Democracy project at the Hunsfoss Paper and Pulp Mill, which began in 1964 (Emery and Thorsrud, 1969, 1976)--where, for the first time, an "action group" of workers, technicians, and supervisors was created in order to diagnose the malfunctioning of the particular system they were concerned with. Emery was again the initiator. The condensed version quoted below from Trist (1981) has been put in systems terms to make it as general as possible.

1. An initial scanning is made of all the main aspects--technical and social--of the selected target system--that is, department or plant to be studied.

2. The unit operations--that is, the transformations (changes of state) of the material or product that take place in the target system--are then identified, whether carried out by men or machines.

3. An attempt is made to discover the key variances and their interrelations. A variance is key if it significantly affects (1) either the quantity or quality of production, and (2) either the operating or social costs of production.

4. A table of variance control is then drawn up to ascertain how far the key variances are controlled by the social system--the workers, supervisors, and managers concerned. Investigation is made of what variances are imported or exported across the social-system boundary.

5. A separate inquiry is made into social-system members' perception of their roles and of role possibilities as well as

constraining factors.

6. Attention then shifts to neighboring systems, beginning with the support or maintenance system.

7. Attention continues to the boundary-crossing systems on the input and output side--that is, supplier and user systems.

8. The target system and its immediate neighbors are then considered in the context of the general management system of the organization as regards the effects of policies or development plans of either a technical or social nature.

9. Recycling occurs at any stage, eventually culminating in design proposals for the target and/or neighboring systems.

Note: From The Evolution of Socio-Technical Systems: A Conceptual Framework and an Action Research Program (p. 33) by E. Trist, Ontario Quality of Working Life Centre, Ontario, Canada.

APPENDIX H:

COMPARISON OF THE OLD PARADIGM WITH THE NEW PARADIGM

COMPARISON OF THE OLD PARADIGM WITH THE NEW PARADIGM

OLD PARADIGM	NEW PARADIGM
The technologifal imperative	Joint optimization
Man as an extension or the machine	Man as complementary to the machine
Man as an expendable spare part	Man as a resource to be developed
Maximum task breakdown, simple narrow skills	Optimum task grouping, multiple broad skills
External controls (supervisors, specialist staffs, procedures)	Internal controls (self-regulating subsystems)
Tall organization chart, autocratic style	Flat organization chart, participative style
Competition, gamesmanship	Collaboration, collegiality
Organization's purposes only	Members' and society's purposes also
Alienation	Commitment
Low risk-taking	Innovation

Note: From The Evolution of Socio-Technical Systems: A Conceptual Framework and an Action Research Program (p. 42) by E. Trist, Ontario Quality of Working Life Centre, Ontario, Canada.

APPENDIX I:

QUALITY OF WORK LIFE APPROACHES USED AT GENERAL MOTORS

QUALITY OF WORK LIFE APPROACHES USED AT GENERAL MOTORS

1. Conceptual models. Use as a means of integrating knowledge, providing understanding, and guiding developmental strategies.

2. Educational systems. Design to integrate knowledge and skill mainly through experience-based exercises.

3. Measurement. Develop and apply measurement tools to reflect people's perceptions of critical organizational variables and link these to operating performance to demonstrate relationships.

4. Action research. Sponsor jointly with line management and union officials to diagnose problems, identify solutions, implement change, and reevaluate.

5. Demonstration projects. Carry out special projects, involving the joint sponsorship of the formal organizations, that may not be directly tied to an identified organizational need but may have long-term organizational implications.

6. Implementation of new concepts of organizational design. Apply sociotechnical principles to the design and operation of new facilities.

Note: From GM Quality of Work Life Efforts: An interview with Howard C. Carlson, July-August, 1978, Personnel (p. 31).

APPENDIX J:

BASIC PRINCIPLES OF THE QUALITY OF WORK LIFE EFFORT AT GENERAL MOTORS

BASIC PRINCIPLES OF THE QUALITY OF WORK LIFE EFFORT AT GENERAL MOTORS

1. Develop a broad and flexible understanding of how organizations function, change, and develop.

2. Start where the organization is, not where people think it is.

3. Use measurement/research as a source of information and as a developmental strategy.

4. Involve in the developmental process those who are most likely to be affected by any significant changes.

5. Ability to influence decisions and the decision-making process must be an integral of the involvement process.

6. Resources must be provided to support developmental strategies and to ensure their continuity.

Note: From GM Quality of Work Life Efforts: An interview with Howard C. Carlson, July-August, 1978, Personnel (p. 22).

APPENDIX K:

MATERIALS FOR FOLLOW-UP INTERVIEWS:

WRITTEN CONSENT FORM;
DEMOGRAPHIC INFORMATION;
STS/QWL INTERVIEW SCHEDULE

WRITTEN CONSENT FORM

SOCIO-TECHNICAL SYSTEMS/QUALITY OF WORKING LIFE (STS/QWL) ALTERNATIVE PARADIGM: AN URBAN SECONDARY SCHOOL EXPERIENCE (1982-1983)

I.

I, Antonio Gizzi, am a doctoral student in the Boston Secondary Schools Project (BSSP) at the University of Massachusetts, Amherst. I am conducting a study to apply those elements of the high-participative management paradigm, the Socio-Technical Systems/Quality of Working Life (STS/QWL), that offer to improve the quality of working life in the urban secondary school where we were both participants during the 1982-1983 school year, and to compare the results of this study with the relevant characteristics of the STS/QWL paradigm. To complete my data collection, I am conducting interviews with selected stakeholders employed or affiliated with me as a colleague and participant during the 1982-1983 school year.

II.

You are being asked to be a participant in this study. I will conduct one in-depth interview with you that will last approximately 45 minutes. Telephone interviews will facilitate the process and can be arranged at your convenience.

III.

The interviews will be audio-taped and later transcribed by a professional typist. My goal is to analyze and compose the materials from your interview (you will be one of approximately 65 individuals invited to be participants) for:

(a) my written dissertation;
(b) a book I intend to write on improving the quality of working life in urban secondary schools;
(c) journal articles;
(d) presentations to groups interested in improving the quality of working life in urban secondary schools through the socio-technical systems concept;
(e) and, finally, in-service meetings, staff development, and instructional purposes.

In all written materials and oral presentations in which I may use materials from your interview, I will use neither your name nor your initials, nor the names of people you have mentioned in your interview, nor the name of your school. Transcripts will be typed with code names for all proper names.

(It must be noted that the secondary school with which the stakeholders interviewed for this study were affiliated during 1982-1983 may be easily identified.)

IV.

While consenting at this time to participate in this interview, you may at any time withdraw from the actual interview process.

V.

Furthermore, while having consented to participate in the interview process and having so done, you may withdraw your consent to have specific excerpts from your interview used in any printed materials or oral presentations if you notify me within 30 days of your interview.

VI.

In signing this form, you are agreeing to the use of the materials from your interviews as indicated in Sections III, IV and V. If I were to want to use the materials from your interview in any ways not consistent with what is stated in Section III, I would contact you to get your additional written consent.

VII.

In signing this form, you are also assuring me that you will make no financial claims on me for the use of the material in your interview.

VIII.

Finally, in signing this, you are thus stating that no medical treatment will be required by you from the University of Massachusetts should any physical injury result from participating in this interview.

At your request, I will be happy to supply you with a transcription of your interview.

- -

I, _____, have read the above statements and agree to participate as an interviewee under the conditions stated above.

Appointment selected:

Date: _____

Time: _____

Telephone: _____

_____
(Signature of Participant)

Date: _____

_____
(Signature of Interviewer)

Date: _____

DEMOGRAPHIC INFORMATION

SUBJECT NAME:

SUBJECT CODE:

RACE:

MATURITY RANGE:

GENDER:

EDUCATIONAL LEVEL:

TEACHING/SCHOOL EXPERIENCE:

POLITICAL INCLINATION:

CONSERVATIVE

LIBERAL

STAKEHOLDER LEVEL: _____

STS/QWL INTERVIEW SCHEDULE

1. The purpose of this study, in brief, is to apply STS/QWL elements or characteristics to improve the quality of working life of the Central High School staff during the relevant year and to refine those STS/QWL characteristics that define such an improvement. STS/QWL also calls for system changes versus piecemeal changes. In your opinion, what STS/QWL or commonsense elements, approaches, and/or conditions should an urban secondary school management model offer that would suggest an improvement in the quality of your working life and for the stakeholders involved? Would these improvements improve teacher effectiveness and quality of education?

2. In order to convert conflict to collaboration and cooperation and survival for all stakeholders, the headmaster appreciated and sanctioned a genuine high-participative management system to address every area and stakeholder. Conflict can be a simple opposite stance to a maximized difference of opinion. The participative incentive was to share leadership and to offer involved stakeholders minimum critical specifications: a "here is the situation--bring back the solution" approach. Which activities, if any, were you involved in with administrators or staff that began with conflict--to whatever degree--and resulted in collaboration and cooperation? What were the reasons for the outcome?

3. What is your perception of satisfaction with the educational leadership at the governance levels, such as the school committee, the superintendent, the deputy superintendents, and the district superintendents; as well as with union and/or administrators' organizations, parent groups, business and college collaborations, and teachers?

4. How would you characterize the administrative leadership structure of the Central High School during the relevant year, which includes the headmaster, administrative assistant, assistant headmasters, department heads, housemasters, and others placed in leadership positions?

5. How would you characterize the staff structure in terms of effectiveness, including a specific self-evaluation?

6. In this study, I have made a distinction between the contextual concept of "participative management" and "participative leadership." (The researcher will read his definitions of participative leadership and participative management.) What are your perceptions, if any, of the definitions when considering your years of experience, level of education, maturity level, and value system?

7. Did you experience thoughts of being underemployed, even though you were teaching in your chosen profession, or of being under-utilized by not being able to use all of your talents? Can you explain your answer and offer any implications or solutions?

8. Do you get a sense that, as a result of your educational level and media exposure, your ideological sense of democracy makes you more or less inclined to accept leadership, authority, and/or surrendering your participative perspectives? Could you explain your answers?

9. How would you perceive autonomous teacher teams in a high participative management paradigm in terms of their offer to improve the quality of working life for staff, effectiveness of performance, and the quality of education as compared with the current one-teacher, one-class system?

10. Exclusive of curriculum and program, what work conditions and/or specific areas of need should be addressed in the organization of an urban secondary school that would make your work life a more satisfying circumstance? Why?

11. This final question is atypical in interview questions: Is/are there any question(s) relating to this study or process in which we have participated that you would like to ask of me and/or think that I should include in the remaining interviews?

a. Presented by Mr. Adam:

-- What role does personality <u>add</u> or <u>negate</u> in promoting change or obstructing change?

-- How do/did you evaluate the headmaster's personality in this exercise? Why?

-- How do/did you evaluate the program director's personality in this exercise? Why?

b. Presented by Mr. Casey:

-- Did you get a sense that the school department intended to limit the tenure of the headmaster appointed in 1982-1983? If so, what reason(s) do you offer?

c. Presented by Mr. Bird:

-- In your perception, how much influence did the headmaster exercise on the stakeholders, based on their perception that he was an interim or temporary headmaster who was sent in to close the school or to be a caretaker?

Reserve Questions

1. What do you think the business community should be doing for education to help improve the quality of education in urban secondary schools?

2. What do you think the business community should be doing in order to help improve the teacher excellence and quality of working life in urban secondary education?

3. Would you consider teaching as a career again? Why?

4. Would you recommend teaching as a career to your pupils? Why?

5. When or how soon would you like to retire from teaching? Why?

6. What do you think professionalization will do for you and for education?

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